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ABSTRACT

This report describes and evaluates the activities undertaken by the Washington Center for the Improvement of the Quality of Undergraduate Education between 1986 and 1988. The goal of the Center is to improve undergraduate education through five central activities: (1) assisting participating two- and four-year colleges in the establishment of programs built on a "collaborative learning communities" model, a broad term for a variety of interdisciplinary approaches; (2) inter-institutional faculty exchanges; (3) a small seed grant program to assist colleges in curriculum or program development; (4) conferences and seminars on "learning communities," critical thinking instruction, and other effective approaches to undergraduate education; and (5) technical assistance to colleges. In addition to presenting the history and objectives of the Center, this report describes the methods used to evaluate the Center's activities and discusses outcomes. General comments on the Center's impact on faculty, students, and institutions are provided, as well as a more detailed assessment of the "learning communities" programs. Information is presented about the ways in which students became aware of the program and the influences on their decision to enroll, ways in which students in learning community programs differed from students in traditional programs, the attitudes, values, and intellectual development of these students, and 38 steps in developing successful learning community programs. The final section of the report considers ways in which the Center can continue to support the campus-based programs it has initiated. A study of the intellectual development of students in the programs is appended, as well as readings that describe the origins of the Washington Center, its structure, and its influence on faculty development and curricular reform in Washington State. (AYC)

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Washington Center
for the Improvement of the Quality of
Undergraduate Education

Final Report to the Ford Foundation 1986-88

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Volume I: Institutional Self Study

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Washington Center
for Improving the Quality of
Undergraduate Education

FINAL REPORT TO THE FORD FOUNDATION

December 1988

The Washington Center for Improving the Quality of Undergraduate Education

FINAL REPORT TO THE FORD FOUNDATION
1986-88

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ACKNOWLEDGEMENTS AND FOREWORD

In May 1986, the Ford Foundation awarded a $75,000 grant to the Washington Center for Improving the Quality of Undergraduate Education. This self study, the reports of the external evaluators, and accompanying documents constitute the final report to the Ford Foundation.

We are grateful for the time and vital contributions so many of our colleagues have made toward the creation of this report. Members of the Washington Center's Evaluation Committee and its Planning Committee offered important suggestions and additions to the self study narrative. Numbers of faculty and Washington Center institutional contacts shared with us not only their syllabi, program assignments and evaluations, but also their experiences, their fears, and their aspirations. Our research assistant, Terry Rooker, gathered and analyzed the data from the twelve institutions participating in our evaluation efforts during the 1987-88 year. Donna McMaster, Program Assistant in the National Faculty's Northwest Regional Office, assisted us with gathering an archive of all of the resource material. Roberta Floyd provided invaluable clerical assistance in typing portions of this manuscript. Washington Center staff members Laura O'Brady and Judy Volanti helped type, edit, and assemble the documents for printing. Finally, dozens of administrative assistants and staff throughout our member institutions helped gather the information for this study.

We also would like to acknowledge the project's external evaluators, Faith Gabelnick and Patsy Fulton, for their questions, their insights, and their enduring visions of institutional effectiveness and successful collaborative endeavors.

Barbara Leigh Smith
Director

Jean MacGregor
Assistant Director

EXECUTIVE SUMMARY

In May 1986 the Ford Foundation awarded a $75,000 grant to the Washington Center for Improving the Quality of Undergraduate Education. Its interest was twofold: first, in the Center's work bringing two- and four-year schools together and second, in the Center's emphasis on learning communities as a means of increasing coherence in the curriculum. Ford provided the seed money necessary to sustain the Washington Center until the state provided ongoing funding for the Center in July 1987. This self study and the accompanying documents constitute the final report to the Ford Foundation.

The Center's focus has been on improving undergraduate education through five central activities: 1) assistance in the establishment of model programs with a particular focus on those organized as "collaborative learning communities"; 2) inter-institutional faculty exchanges; 3) a small seed grant program; 4) conferences and seminars and a newsletter on effective approaches to undergraduate education; and 5) technical assistance. The Center has operated on the assumptions that low-cost approaches must be found to improve undergraduate education and to excite and revitalize faculty, and that the reform effort must come from within the higher education community itself. The overall effort is animated by a commitment to collaboration in the Center's own practice as a key element in its approach to undergraduate reform.

In the four years since it was initially established, the Washington Center has had a substantial impaot on higher education in Washington State: it is described by one member of the Center's Planning Committee as a "prairie fire burning across the state...joining the institutions in a loose but intense confederation for the purpose of improving undergraduate education." Thirty-six institutions are now affiliated with the Center; 23 of the 27 community colleges are affiliated with the Washington Center, as are all of the four-year public institutions and 6 of the 8 major private institutions. Eighteen colleges and universities have established learning community model programs in which thousands of students are enrolled. These programs have proven to be highly effective in terms of student learning and student retention. The learning community formats have proven versatile and applicable to any curricular area. The learning community effort has been instrumental in creating a new climate of innovation and collaboration within many of the institutions in Washington state. Inter-institutional faculty exchanges are taking place between a growing number of the participating institutions, providing an effective vehicle for the transfer of knowledge between faculty, and an exciting and low-cost form of faculty revitalization.

There were four specific objectives of the Ford Foundation grant. All of the objectives were substantially exceeded:

First, to continue a quarterly conference series with 75-100 people and 15 institutions in attendance (12 major conferences have been sponsored for more than 600 people from 58 colleges and universities);

Second, to continue learning communities at Tacoma Community College, Seattle Central and North Seattle Community Colleges, Western Washington University and The Evergreen State College and to initiate learning communities at four others (learning communities have been established at 14 additional schools);

Third, to continue and expand the Washington Center program of inter-institutional faculty exchanges with a target number of 20 (the number achieved was 32 exchange faculty or a total of 91 faculty involved in exchanges, if we count those team teaching for a full quarter with exchange faculty); and

Fourth, to continue to provide technical assistance to participating institutions.

In addition to providing detailed descriptions of each of the major activities of the Washington Center, the self study contains a set of recommendations regarding the establishment of successful learning communities. Also included, as Volume III of this document, is a record of each institution's work relating to the Washington Center. Organized by school, this volume should be a valuable resource file of materials related to learning community program development. Survey data comparing attitudes and values of students in learning communities and comparison classes is also available for most of the colleges which had learning community programs in the 87-88 academic year.

SELF STUDY NARRATIVE

History of the Project

The Washington Center for Improving the Quality of Undergraduate Education was established at The Evergreen State College in 1985 as a statewide consortium devoted to improving undergraduate education. The Washington Center's work emphasizes learning community curricular designs and collaborative teaching and learning approaches. These are particularly effective in improving undergraduate education because they address simultaneously the issues of curricular reform and faculty revitalization. The Washington Center views the higher education system in Washington state as one system, and strives to establish close working relations between the two- and four-year institutions in the state. The Center's major activities involve assisting in the development of model undergraduate curricula, brokering faculty exchanges between institutions, sponsoring conferences and seminars, administrating a small seed grant program, and providing technical resources to its member institutions. It also acts as a small-scale clearing house for information on learning community model curricula around the nation.

The Exxon Foundation provided the initial start-up funds for the Center with a seed grant of $50,000; Exxon's main interest in the Center was as a vehicle for faculty revitalization. The Ford Foundation provided continuation funds for the Center when the Exxon grant was exhausted; the Ford Foundation had a special interest in the Center's work on inter-institutional collaboration, especially between two- and four-year institutions. Continuing support for the Center was secured in July 1987 when the Washington State Legislature funded the Washington Center as a statewide public service initiative. During the 1985-87 period, the Center operated with a Director contributing her time, a half-time Assistant Director, and minimal clerical support. Beginning July 1987, the Center had a quarter-time Director, a full-time Assistant Director, and 1.25 support staff.

The Center and its member institutions also continue to raise funds through public and private grants. In the past two years significant matching funds for related work have been awarded to the Center and to several members of the consortium. Grant monies have come from the Matsushita Foundation ($42,000 for collaborative projects between colleges and high schools); the Burlington Northern Foundation ($22,000 for housing subsidies for exchange faculty); the League for the Humanities ($25,000 to Tacoma Community College for developing model learning communities in humanities for part-time students, in collaboration with The Evergreen State College); and from the Department of Education, especially Title III

(to North Seattle, Seattle Central and Yakima Valley Community Colleges for learning community development and evaluation). A large number of learning community model programs have been developed by institutions redeploying their own resources. Leveraging its resources has been a major strategy of the Center. It has been remarkably successful in this endeavor, with a three-year record of leveraging its Ford dollars at a 1:53 ratio. The yield ratio is 1:6 on the state of Washington's investment in the Center.

The Center operates around several assumptions and values. First, we assume that undergraduate educational reform efforts built around expensive models are unrealistic. We also assume that true reform must spring from within--both people and institutions. Much attention has been paid to how our current systems of post-secondary education affect students; too little is said about what it does to faculty. We must search diligently for exciting, effective, low-cost ways to stretch and revitalize and reward faculty. Second, the glue of successful consortium work can only be developed through face-to-face relationships between individuals. These are built through team-teaching, small interactive seminars and retreats, "kibitzing," meetings held at different locations, and a great deal of campus visits and listening on the part of the Center staff. Finally, the Center's overall effort is about collaboration: between students in classrooms, between students and faculty, between faculty within and between institutions. The consortium effort attempts to model this collaborative approach as well: we operate with a lean central staff based at Evergreen working closely with inter-institutional committees. These committees play a strong role in shaping the Center's mission and focus, evaluation efforts, seed grant program and conference emphases.

Ford Project Objectives

In its proposal to the Ford Foundation, the Washington Center outlined four major objectives:

1. **Continuation of its quarterly conferences for participating institutions with the agenda and needs based upon the expressed needs of the institutions. The projected number of participants was 75-100 people and 15 institutions at these conferences.**

The Washington Center's conferences are fully described in the Conferences section in Volume II of this report. The conference objective of the Ford grant was substantially exceeded. The Washington Center has sponsored 12 major conferences in the past three years. In the 1987-88 academic year, The Center held four major conferences. Two were on Learning Communities, in Seattle and Ellensburg; one was on Critical Thinking in Seattle; and one was on Thinking and Writing in Spokane. Each conference had an attendance of approximately 150. In addition, the Center sponsored five smaller conferences, an annual statewide curriculum planning retreat, a workshop on teaching in coordinated studies programs, and a presentation by noted mathematics teacher Uri Triesman. The Center's conferences attracted over 600 participants from 23 four-year institutions and 35 community colleges in the northwestern states, Hawaii and British Columbia.

2. **Continuation of learning community programs at Tacoma Community College, Seattle Central Community College, North Seattle Community College, Western Washington University, and The Evergreen State College, and the initiation of new programs at four additional schools.**

Learning community programs have continued at all of the projected schools and are expanding at Tacoma Community College, Seattle Central, and North Seattle Community College. In addition, the following 14 schools have initiated or are about to initiate learning community programs: Bellevue Community College, Yakima Valley Community College, Centralia Community College, Everett Community College, Shoreline Community College, Whatcom Community College, Skagit Valley Community College, Lower Columbia Community College, Spokane Falls Community College, Green River Community College, Edmonds Community College, Eastern Washington University, Western Washington University and the University of Washington. Descriptions of the various efforts underway at each school are included in Volume III of this report.

A portion of the Ford monies was awarded to member institutions as seed grants for learning community development and efforts to improve curricular coherence. They were made to:

- Tacoma Community College ($4,800) for two projects to link courses: the first involving Chemistry 100 and English Composition; and the second, Principles of Economics and Business Calculus.

- Fairhaven College at Western Washington University ($3,000) for a collaborative program with Whatcom Community College. A faculty exchange relationship was begun, with Whatcom and Fairhaven faculty members jointly teaching courses of the Fairhaven Core program to students on both campuses.

- Bellevue Community College ($3,000) to provide release time for faculty to develop a pilot learning community program,

- North Seattle Community College ($1250) to hold a series of off-campus planning retreats with Seattle Central and Bellevue Community College faculty members, to work on the development of coordinated studies programs. (North Seattle and Bellevue used just a portion of this grant but went on to develop strong learning communities on their campuses).

The Ford-funded seed grant process became a model for the Center, which it has now expanded with state funds, and through its Matsushita Foundation-funded college-high school collaborations effort.

3. **Continuation and expansion of faculty exchanges. The target number of exchanges in this project was 20.**

In the two-year period from Fall 1986 to Spring 1988 the actual number of faculty exchanges was 32. These exchange faculty were involved in collaborative teaching situations for at least one full quarter and in some instances a full academic year. The total number of faculty involved as

exchange faculty or teaching with these exchange faculty is 91 for the two-year period, nearly four times the national Faculty Exchange Center's record. Team-teaching leverages the impact of these faculty exchanges substantially. Schools involved with the faculty exchange effort to date include The Evergreen State College, Seattle University, The University of Washington, Western Washington University, and these community colleges: Tacoma, Spokane Falls, South Puget Sound, Seattle Central, North Seattle, South Seattle, Shoreline, Lower Columbia, Green River, Bellevue, Whatcom, and Centralia. The Faculty Exchange section in Volume II lists these exchanges.

In Fall 1987 the Burlington Northern Foundation provided the Washington Center with a grant of $22,000 to provide small housing subsidies for exchange faculty. This fund will last about two years.

4. Continuation of Center technical assistance to the participating institutions.

This activity of the Washington Center continues to expand and requests now substantially exceed the Center's capacity to respond as fully as we would like. "Technical assistance" covers a broad range of activities. The Center receives a large volume of requests from its member institutions and from institutions outside Washington state: these range from general inquiries about learning community approaches and the Washington Center consortium model, to specific questions about resource materials, technical expertise, to requests for consultation on conference or retreat design or learning community implementation issues. The staff strives to maintain frequent contact with key individuals in each of the Center's affiliated institutions. At the end of each quarter, the Center staff conducts debriefings of the faculty involving in learning community efforts. The staff also manages the seed grant program (assisting in the development of proposal ideas as well as monitoring existing seed grant projects) and related projects such as the grants from the Matsushita Foundation and Burlington Northern; produces printed materials such as the quarterly newsletters and resource notebooks; and organizes the Center's conferences and retreats.

Having a full-time Assistant Director has helped the Center provide more technical assistance, as has the development of a cadre of "kibitzers" (informal consultants) who can lead workshops and consult with different schools. Kibitzers this year helped consult on learning community curriculum design in a variety of contexts; led workshops on writing, book seminars and building collaborative teams; and acted as facilitators for faculty working on a variety of curriculum planning issues. In order to decentralize and strengthen The Washington Center effort, the concept of "Washington Center associates" or "collaborating faculty" is being explored; it would involve a substantial amount of training of faculty leaders in member institutions. Eventually, it will be necessary to expand the Center's staff and to designate someone with lead responsibility for central and eastern Washington.

THE WASHINGTON CENTER'S EVALUATION WORK

Introduction

From the beginning the Washington Center adopted an approach which builds ongoing evaluation into our operation and uses it as a process for self-improvement and future planning. We want to do meaningful evaluation that illuminates and supports the teaching process. Although evaluation is often done for purposes of accountability, our interest continues to be in using evaluation for development. The approaches we have taken have varied over time and are still developing. It was clear from the beginning that the evaluation effort would be an important, but challenging, aspect of the Center's work. It needs to be supportive of the diversity that characterizes our member institutions, and the various learning community models that are being explored. The effort also needs to directly support the Washington Center's focus on positive institutional change and the improvement of undergraduate teaching and learning, without being heavy-handed or intrusive. Since the focus of the Washington Center is at four levels---faculty development, student development, institutional development, and consortium development--the evaluation approach needs to be multifaceted. And, with limited resources for evaluation, the effort needs to be carried out at minimal cost.

To assist in this effort, the Center created an Evaluation Committee in the summer of 1986, with faculty members and administrators drawn from six institutions. This committee, assisted by consultant Faith Gabelnick[1], built the evaluation plan for 1986-87. It met periodically that year to monitor the progress of the evaluation work and to reshape the evaluation plan for 1987-88. During the 1987-88 year, the committee expanded to include "evaluation contacts" at each institution running a learning community--faculty members who assisted with gathering retention and survey data and who have now joined in the evaluation committee's work. This growing body of individuals interested in evaluation as a strategy for educational improvement is critical, we feel, to the Center's evaluation effort.

Evaluation of Learning Community Model Programs

In the 1986-87 academic year, the evaluation effort encompassed three intertwined efforts, involving research on outcomes for faculty, students and institutions. Faculty members team-teaching in learning communities were asked to do reflective writing at the beginning, in the middle, and at the end of each quarter. Washington Center staff also conducted "debriefing" interviews with faculty teams at the end of each quarter; these interviews were tape-recorded. The staff also conducted interviews with administrators at institutions launching learning communities, to

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[1] Faith Gabelnick was Associate Director of the General Honors Program at the University of Maryland prior to becoming Dean, in 1987, of the Honors College at Western Michigan University in Kalamazoo.

learn what impact they were having and what issues were being raised. The Measure of Intellectual Development[2] was administered as a pre- and post-test to 512 students in 14 different learning community programs at seven institutions. Learning community retention data was gathered. Finally, faculty teams were asked to develop their own learning outcomes for their learning community programs--an abbreviated "Alverno approach"--and report their results to us.

It rapidly emerged that the Center's resources and time were too limited to sustain every aspect of this effort thoroughly. Day-long or half-day orientation meetings with the targeted faculty teams were well received: faculty came to new levels of awareness or understanding both of assessment and of William Perry's scheme of intellectual development of students. Faculty writing generated at these workshops was substantive and rich. During the busyness of the quarter, however, very little follow-up occurred in terms of additional reflective writing, in spite of repeated reminders from the Center. The end-of-quarter debriefing interviews did take place as planned and were very useful both for faculty, administrators who frequently sat in on them, and for the Washington Center staff. In addition, institutional interviews were conducted, and are seen now as crucial to the Center's work in building a closer understanding of each campus, its context and climate. The Measure of Intellectual Development essay writing tests were administered; the resulting data appears as The Washington Center's "Occasional Paper Number 1," which is included in the Publications section of Volume II of this report. The learning outcomes portion of the effort was the least successful: the "outcomes" orientation was new to many of the faculty members; the Center's expectations were inadequately explained; and the request seemed intangible and unduly bureaucratic.

In the 1987-88 academic year, the evaluation effort built upon the previous year's experiences by extending and deepening some efforts, and abandoning others. End-of-quarter debriefing interviews were conducted, and tape-recorded at the end of Fall and Spring quarters. Institutional visits continued, but on a less formal basis. Pre- and post-tests of The Measure of Intellectual Development instrument, along with a demographic survey and attitudinal questionnaire were administered both to students in learning communities and to carefully matched control groups at each institution during Winter and Spring Quarters. Close to 1000 students and ten institutions were involved in this much more ambitious data-gathering effort. The Center supported the effort by inviting one faculty member at each institution to serve as an evaluation contact person, and by hiring a part-time research assistant to analyze the information gathered.

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[2]The Measure of Intellectual Development instrument was developed by Lee Knefelkamp and Carole Widick. The essays were scored by Bill Moore, at The Center for the Study of Intellectual Development in Farmville, Virginia.

In addition, some learning community programs administered detailed end-of-program evaluation questionnaires. Others used the SGID process[3] as a means of doing mid-course corrections in their programs.

The scaled-back level of evaluation work this past year brought increased focus to the evaluation effort, but it is clear that these efforts still require more time and resources than has been devoted to them this year. A presentation and discussion of the data gathered appears below. The end-of-quarter debriefing interviews continue to be an excellent evaluation tool, and they contain important insights about teaching effectiveness and the faculty development process. The Center staff is only now preparing to transcribe two years' of taped interviews. The data from the pre- and post- MID essays and associated questionnaires is quite extensive, and illuminating, but it could have been more complete than it is. Faculty administering the MID would benefit from a much clearer understanding of what the instrument is measuring, and from quicker feedback on their student scores than the complex rating system provides.

Our evaluation committee has expanded this year. With many more people and institutions involved, we need to continue to build understanding about the nature of our work on evaluation: who this information is for, and what we are seeking to learn. Evaluation plans for the coming year will involve some decentralization and diversification. The Center hopes to encourage and support smaller, locally designed evaluation work on its participating campuses, while still encouraging the sharing of results through a committee meeting process. It also plans to encourage wider use of in-classroom evaluative processes, such as the SGID process and Pat Cross-Tom Angelo "classroom assessment"[4] techniques. Finally, at the strong suggestion of the Center's Planning Committee, we will encourage more careful documentation of programs as well as evaluation of them.

Evaluation of Center Emphasis and Programs

Early in the Washington Center's life, a Planning Committee comprised of faculty and administrators from four community colleges (Bellevue, North Seattle, Seattle Central and Tacoma) and four four-year institutions (The Evergreen State College, University of Washington, Seattle University and Western Washington University) was drawn together, to assist the Center in direction-setting and feedback. The committee was expanded in 1987 to

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[3] Small Group Instructional Diagnosis, or SGID, is a technique for gathering qualitative feedback data quickly and anonymously. The teaching faculty depart for a class session, and another faculty member leads a discussion (to which all students contribute anonymously) on what is going well in the program, what isn't going well, and what suggestions can be made for improvement. The faculty member(s) then read and respond to the information generated.

[4] K. Patricia Cross and Tom Angelo, Classroom Assessment Techniques: A Handbook for Faculty. National Center for Research to Improve Postsecondary Teaching and Learning, School of Education, University of Michigan, Ann Arbor, MI 48109.

include one eastern Washington institution, Spokane Falls Community College. This 21-member group meets quarterly on different campuses in the Seattle area. In February, 1988, the Planning Committee gathered for a two-day retreat to evaluate the Center's first two-and-a-half years and to build focus for the near future. An out-of-state kibitzer (James Crowfoot, Dean of the School of Natural Resources at the University of Michigan, and an expert on institutional collaboration and change) assisted with this reflective and idea-generating event.

Additional feedback has been gathered from the Washington Center community, through evaluation questionnaires at each conference, and through a major survey questionnaire administered in the spring of 1987 to the 200 faculty most actively involved in Washington Center programs. (There was a 35% response to this survey). Finally, two external evaluators made two site visits, in May 1987 and October 1988, and provided the Center with a written report of insights and recommendations. The evaluators are Faith Gabelnick, Dean of the Honors College at Western Michigan University, and Patsy Fulton, President of Brookhaven College in Dallas, Texas.

The Evaluation section in Volume II further details the plans and elements of the Center's evaluation efforts as they evolved. The following table summarizes the information sources available to evaluate the Center's progress.

SOURCES OF DATA

available for

EVALUATING IMPACT OF PROGRAM

	Impact on Faculty	Impact on Students	Impact on Institutions
Taped interviews of faculty	X	X	X
Faculty reflective writing	X	X	X
Faculty presentations, awards, etc.	X		
Interviews with key administrators and faculty	X	X	X
Program syllabi	X	X	X
Retention data		X	
Institutional commitment in terms of financial investment	X	X	X
Transfer to 4 yr college		X	
Demographic survey of student values and attitudes		X	
Measure of Intellectual Development Instrument		X	
Small Group Instructional Diagnosis (SGID)	X	X	
Participation rates in Center activities	X	X	X

THE IMPACT OF THE WASHINGTON CENTER

The Washington Center is having a substantial impact on students, faculty, individual institutions, and the higher education system in Washington. Participation rates in all aspects of the Center's activities are one vivid measure of impact. In sheer numbers, the Washington Center has reached a remarkable number of people and institutions through its faculty exchanges, conferences, seed grants, newsletters and printed materials, and the learning community model programs on participating campuses. More significant is the fact that a substantial proportion of the Center's emerging "community" members continue to interact on an ongoing basis. They constitute a new type of statewide "professional community" devoted to improving the state's higher education system.

Impact on Faculty

The Center's promotion of collaborative teaching has been a powerful force for faculty revitalization throughout the state, especially in the two-year colleges. Learning communities are well under way at a variety of institutions and are spreading to additional ones. The retention rates of these programs are high, even in areas where attrition is often substantial. The faculty teams report that they and their students are motivated and challenged.

While the effectiveness of these programs is a sufficient reward in and of itself, it is clear that learning communities which involve collaborative teaching are also addressing a deep hunger for more meaningful collegial relations on the part of the faculty. Faculty are eloquent in their descriptions of what they have learned from one another and of their newfound senses of purpose and comraderie. Increasing numbers of faculty are expressing interest in becoming part of the learning community work. These programs have produced a new vitality and a renewed commitment to teaching and educational improvement. Teaching in concert with others provides faculty with the opportunity to reflect on their approaches, to explore new material, and to observe closely and learn from their colleagues. Those teaching teams who meet regularly for "faculty seminar" --unfettered intellectual time and space with their colleagues-- find it to be intensely provocative and invigorating.

Faculty are almost uniformly convinced of the effectiveness of learning communities. They report that altering the structure **does** improve the quality of their teaching. The opportunity to get to know a group of students well over the course of a quarter, rather than dealing with 150+ students on a more fragmented course-by-course basis, leads to a deep vestment in student learning and a satisfying sense of fulfillment. The quality of each week is also enhanced, faculty members repeatedly report, by the reconfiguration of the teaching schedule to allow for extended class

meeting times, as well as prep days, faculty seminars, and planning meetings. With this new perspective about time and colleagues, faculty frequently remarked they dread returning to the 50 minute hour and to teaching alone again. Faculty members pointed most frequently to the value of planning and reflecting on teaching approaches with colleagues as a means of enhancing both the quality of the program at hand and their expertise in general about effective pedagogy.

Through inter-institutional exchanges, a large number of faculty have gained new perspectives on the people and institutions in Washington state; this program has been valuable to those exchanging and to the faculty they join. The faculty exchange program has been particularly beneficial to the community college system and The Evergreen State College. Faculty exchanges allow a faculty member to participate in a new institutional culture and gain new perspectives on and understanding of their own institutions. Many exchange faculty report that the experience gives them a sense, for the first time, that the Washington higher education system <u>is</u> a system and that they are valuable players in a larger enterprise. Exchange faculty, from two- and four-year institutions alike, invariably report a new sense of respect for the talented teachers they encounter in these new institutional environments. Inter-institutional faculty exchanges are often described as a more valuable learning experience than a sabbatical and a real boon to faculty revitalization.

To be sure, there have been a few less-than-positive experiences for some faculty and some faculty teams. They--and we--have learned from them as well. A couple of faculty exchanges did not lead to close and effective collegial relations. Several exchange faculty had difficulty adjusting to the different types of students in the exchange institution. Even without the added complication of having exchange faculty from other institutions, collaborative teaching situations did not always work as well as we hoped. One team had difficulties as a result of bad interpersonal chemistry. Another team learned the hard way that it needed to be more explicit about its expectations of student participation and performance in the program. Several programs with part-time faculty had difficulties sustaining both academic continuity and the workload.

From a faculty point of view, a persistent problem arises from expectations about minimal enrollment levels and from the class size expectations. Students, faculty, and administrators all believe that the class size is often too large for effective educational practice. At the same time, learning communities are succeeding partly because they can be economical and operate close to usual staffing ratios; there is a fairly uniform commitment to maintaining them on this basis. When enrollment in learning communities has been lower than expected, faculty sometimes volunteer to teach an extra course or two to maintain equity; this has usually led to a teaching commitment that is too heavy, and the kind of fragmentation that learning communities are designed to avoid. Some faculty members fret that once the precedent is set, of faculty teaching overloads, it will become an administrative expectation.

Impact on students

The impact of the Washington Center's work on students has been substantial. Over two thousand students have benefited from these new curricular approaches and the attentions of revitalized faculty. Peer relationships in the new model programs are enhanced; students, especially community college students, express great joy in the friendships they have made in the college "for the first time." Close interactions between students and their faculty members are commonplace. Students repeatedly report a new sense of empowerment, motivation, and coherence in their college work. Though this data has not yet been fully analyzed, it appears that the transfer rate from two- to four-year institutions is also being favorably increased as a result of these programs; particularly notable is the transfer rate of the Evergreen-Tacoma Community College Bridge program and the increased number of transfers between the Seattle community colleges and The Evergreen State College.

On the negative side, a few students report feeling swamped by work expectations of faculty. Others seem to have difficulty with the complex conceptual base of many of the programs. More than a few of the learning community programs were confronted with the sometimes difficult issue of what it means to transfer authority and responsibility for learning to the students and what collaborative teaching and learning requires. Though retention has been quite high in the learning community programs in Washington state, some students do leave, mostly for work-related reasons. One program related that those who dropped out were in every case students trying to hold down a full-time job along with a full-time academic program. We need more data on the underlying causes of attrition in some of the learning community programs.

Impact on Institutions

The Washington Center has had a substantial impact on the educational institutions in Washington State in terms of curricular innovation, morale, and institutional revitalization. An ongoing productive dialogue has developed within and between institutions around issues of undergraduate education. The Center played a critical role in fostering new models for curricular improvement and educational innovation. Broad-scale attempts at educational improvement have taken place over the past four years at a variety of participating institutions.

The impact of the Center has been particularly pronounced at two-year institutions where learning community-type programs have been initiated in transfer, developmental, and occupational areas with very promising results in terms of student learning and retention. Program completion rates vary from school-to-school and program-to-program, but the following table gives some indication of the effectiveness of learning communities in terms of student retention. More comprehensive information is provided in Volume III, in which each institution's efforts are more fully presented.

SUMMARY OF INSTITUTIONAL INVOLVEMENT IN WASHINGTON CENTER ACTIVITIES*

Bellevue Community College
Involved in faculty exchanges, seed grants, and assessment program. Coordinated studies and federated learning community model curricula. Developmental and academic transfer areas.

Centralia College
Involved in faculty exchanges, seed grants, and assessment program. Coordinated studies and federated learning community model curriculum in academic transfer areas.

Eastern Washington University
Involved in seed grants and piloting Freshman Interest Group curricular model.

Edmonds Community College
Involved in faculty exchanges. Coordinated studies learning community model curriculum in academic transfer areas.

Everett Community College
Involved in seed grants and assessment program. Federated learning community model curriculum for re-entry women. Other learning community programs in the planning stage.

Green River Community College
Involvement in faculty exchanges, seed grants, and assessment effort. Coordinated studies learning community model curriculum in academic transfer areas.

Lower Columbia College
Involvement in faculty exchanges and assessment effort. Coordinated studies and federated learning community model curriculum in academic transfer and vocational areas.

North Seattle Community College
Involved in faculty exchanges, seed grants and assessment efforts. Coordinated studies and federated learning community model curriculum in vocational, developmental, and academic transfer areas.

Seattle Central Community College
Involved in faculty exchanges, seed grants, and assessment efforts. Coordinated studies, linked courses, and federated learning community model curriculum. Developmental, vocational, and academic transfer areas.

* All the participating colleges are also regularly involved in Washington Center Conferences.

Seattle University
Involved in faculty exchanges, grants, and assessment effort. Building collaborative programs between Seattle University's Matteo Ricci College and Seattle Catholic high schools.

Shoreline Community College
Involved in faculty exchanges, seed grants, and assessment efforts. Linked courses is major learning community model curriculum at Shoreline.

Spokane Falls Community College
Involved in faculty exchanges, seed grants, and assessment effort. Coordinated studies and federated learning community model curriculum in academic transfer areas.

Tacoma Community College
Involved in faculty exchanges, seed grants, and assessment effort. Coordinated studies and federated learning community model curriculum in academic transfer areas. Operates jointly-taught bridge program for minority students with The Evergreen State College.

The Evergreen State College
Involved in faculty exchanges, seed grants, and assessment effort. Coordinated studies is major learning community model used at Evergreen. Course sharing with South Puget Sound Community College. Joint teacher education program with Western Washington University. Joint program for minority students with Tacoma Community College.

University of Washington
Involved in faculty exchanges, seed grants, and freshman interest group learning community curricular design.

Washington State University
Involved in seed grants and assessment effort.

Whatcom Community College
Involved in faculty exchanges, seed grants, and assessment effort. Whatcom has joint program with Fairhaven College at Western Washington University.

Western Washington University
Involved in faculty exchanges, seed grants, and assessment effort. The University's Fairhaven College has joint program with Whatcom CC. School of Education has joint program with The Evergreen State College.

Yakima Valley Community College
Involved in seed grants and assessment effort. Coordinated studies and federated learning community model curriculum in academic transfer and developmental areas.

RETENTION* RATES IN LEARNING COMMUNITY PROGRAMS

	Learning Community	Institutional Average (If Available)
Centralia	91%	
Bellevue	82-92%	78%
Eastern Washington University (FIG'S)	100%	75%
Lower Columbia	93%	87%
North Seattle		
Average for six programs over six quarters	79%	
Retention of individual programs	69-92%	
Seattle Central**		
Average for sixteen programs	75%	
Retention rate for individual programs	54 to 100%	
Challenging the Past	86%	
Exploring New Careers in Health (S 87)	100%	
Exploring DIffrent Cultures	91%	
Exploring New Careers in Health (F 87)	88%	
Business, Society & the Individual	88%	
Exploring New Careers in Health (W 88)	89%	
Shoreline		
rates for six linked courses	94 to 96%	
Tacoma-Evergreen Bridge Program	88%	
Yakima Valley	95%	62%
Fairhaven-Whatcom		
Whatcom (winter)	82%	
Whatcom (spring)	56%	
Fairhaven (Winter)	89%	
Fairhaven (Spring)	79%	

*Retention is defined as the number who complete the quarter of those who were registered on the 10th day.

**This listing represents only some of the learning community programs. The names and retention rates for all programs are included in the individual school sections of Volume III.

To more fully describe the impact of the Center, the following comments were written by faculty and administrators serving on our Planning Committee as an appraisal of the impact of the Center's work:

"At Seattle Central the dual thrusts of the Center on curriculum and pedagogic improvement and faculty development have resulted in new collaborative educational models in transfer, occupational and basic education. Nearly 50 faculty, full and part time, have been involved. After four years enthusiasm remains very high and the faculty development impact has been invigorating. In terms of its impact on the state, the Center has had an effect like a prairie fire that now has burned across the state involving nearly 30 two- and four-year colleges. We are joined in a loose but intense confederation for the purposes of improving the educational experience. The Washington Center is the coordinator and conscience, fueling the flames of creativity and energy by providing time, place, and focus for ideas and activities."

Another at Seattle Central wrote: "At Seattle Central and in the state as a whole, I think teachers and administrators recognize for the first time, perhaps, that it is in their power to shape college education. I don't think most of us had seen it quite that way before because, so much seemed precast, dictated, inherited, and assumed. The most exciting impact is people are looking for methods to solve problems together and are discovering that people need people in education as elsewhere. The Center has also enabled <u>real</u> friendships to develop throughout the state's higher education system. That is real impact."

A representative at the University of Washington wrote: "The Washington Center programs helped provide vision, encouragement and models for the establishment of freshmen interest groups at the University of Washington. Because of the Center's support, all of us working on UW's project were much less susceptible to the typical cynicism, bureaucratic obstacles, value challenges, and general disinterest that too often accompany these kinds of efforts.... We are now beginning to command a strong level of support within our own community."

A representative from the east side of the state wrote: "At Spokane Falls Community College there is an increasing awareness of what can be done by local folks. Faculty at two-year colleges have been made aware that they can do what the best four-year schools do and that they may be in a position to do some things better. Another major impact of the Center might go under the name 'networking.' The Center has allowed people to make friends with others sharing similar goals, both for gaining practical help and for gaining courage to try. Inspiration is closely linked here."

A Bellevue Community College dean used the same metaphor of a burning fire in describing the Center's work: "At Bellevue an atmosphere of change and development has resulted. The central issues of how we learn and teach are becoming the focus. Students are discovering a sense of meaning and the power of learning in learning communities and are becoming more actively involved and responsible. Faculty, staff, and administrators have joined together to plan, initiate, sustain and integrate the changes desired. The impact has been a vital and empowering fire burning in our midst. As the heat spreads, we find that an expanding circle of cohorts are emerging, each with a like fire in their midst."

A long-time Evergreen faculty member wrote: "The Washington Center's impact on Evergreen has been to confirm us in our belief that what we do works! The faculty exchanges have broadened our networks and enhanced our sense that we are all in the same business, helping to break down barriers between two-year and four-year institutions. Students come to Evergreen better prepared. Center programs and people bring us new blood, new ideas and excitement. All of this helps re-invigorate Evergreen."

Larger Impact on Higher Education System

In a relatively short three-year period, the Washington Center has been effective in building a state-wide community devoted to improving undergraduate education through the vehicles of learning communities and collaborative learning. Among key people in a variety of Washington institutions, there is a shared sense of commitment around the Center's core values. The Washington Center has been effective in crossing many of the usual boundaries that divide higher education, bringing together key leaders in two- and four-year colleges and universities and both the public and private sector. It is notable that many of the most central and talented faculty leaders and administrators in these institutions stand committed to the work of the Washington Center. This participatory community is supported by a collaborative and flexible planning and governance process which continues to strive to build a sense of shared values and ownership toward the Washington Center, and a sense that the Center is a responsive, non-bureaucratic organization that serves their needs.

The Washington Center is also gaining increasing national visibility as a unique approach to educational reform. Center people frequently speak at national, regional, and local conferences and they are often asked to make out-of-state presentations on learning communities and collaborative learning. There is also interest in a number of states in replicating the Center itself as an approach to educational reform. The University of Hawaii at Hilo is exploring establishing a similar Center in Hawaii and several other states have indicated a similar interest. We believe that this is an approach which could be profitably emulated outside Washington state. This grass-roots, collaborative approach to educational reform stands as an instructive contrast to many of the more prescriptive and centralized approaches to educational improvement being undertaken in other states.

LEARNING COMMUNITIES IN WASHINGTON STATE:

WHAT WE LEARNED ABOUT THEM AND THE PROCESS FOR SUSTAINING AND IMPROVING THEM

This final section of the self study analyzes what we have learned about our learning community programs and the students in them. As an overall synthesis of our information, the self study concludes with a set of recommendations on how the Washington Center work might be strengthened.

How students hear about learning community programs and who influences their decision to enroll.

As Table 1 indicates (school-by-school breakdowns of this information are available in Volume III), students hear about learning communities from a variety of people and services: these include friends, faculty, and academic advising and registration offices. This suggests that efforts to promote learning communities must be multi-faceted and aimed at informing faculty as well as relevant support staff about the new curriculum. While students in traditional classes report that fulfilling distribution requirements is their main reason for enrolling in a particular course, this is less often the sole motivating factor for students in learning communities. These students report that a number of factors influenced their decision to enroll: the nature of the subject matter, the teaching method, the opportunity for student involvement, the instructors, and because students like themselves might enroll. Students are perceptive in recognizing that learning communities are different in terms of teaching method and student involvement; many students evidently value this difference. Nonetheless, fulfilling requirements is important for all students, and the ability to meet requirements in English is probably critical to many students enrolling in learning communities.

The importance of involving offices of academic advising and registration offices cannot be overstated; more than half the students in our survey cited these offices as important influences in their enrollment decision winter quarter. Several learning community programs experienced registration problems during their initial quarter as a result of poor communication. Problems ranged from course numbering issues to lack of awareness on the part of the staff about the target audience for the program.

Advising staff rightfully believe they have important contacts with students and significant insights into their needs. They are often key people in successfully recruiting the right students into learning community programs. In some institutions, the planning process for learning communities deliberately includes staff in the advising and registration areas, thereby broadening the sense of ownership and involvement. This is a practice that could be profitably emulated on a broader scale.

Some campuses advertise a year-long sequence of learning community programs. Year-long brochures help students see the sequence of offerings and appear to result in more carry-over enrollment from one quarter to the next. A variety of useful promotional materials and approaches have been used in Washington institutions to recruit students. Many of these materials are included in the appendices in Volume III.

TABLE 1

PROGRAM SELECTION AND ENROLLMENT REASONS

ALL SCHOOLS

	Learning Communities		Control Groups	
	Winter	Spring	Winter	Spring
Why did you enroll in this course?				
Enrolled because of subject	80%	63%	61%	51%
Enrolled because of instructor	36%	28%	23%	22%
Enrolled because advised to	30%	21%	28%	15%
Enrolled because met requirements	55%	70%	80%	83%
Enrolled because of student involvement	54%	34%	16%	6%
Enrolled because of teaching process	63%	37%	17%	5%
Enrolled because other students like me did	15%	15%	4%	5%
How did you hear about this course?				
From friends	20%	21%	12%	28%
From Faculty	27%	24%	12%	6%
From Advising	41%	34%	57%	43%
From Registration	8%	16%	15%	23%
How often did you use advising and library services? (Rated on a five point scale with 1=often and 5=seldom. Reported in mean scores).				
Library	2.77	2.8	2.7	2.8
Advising	3.68	3.6	3.8	3.8
Number of cases	320	248	286	149

The characteristics of students who enroll in learning communities. Do these students differ substantially from students in traditional classes?

As Table 2 indicates, students in the control groups and the learning communities were quite similar in terms of average age and sex. Students in learning communities had completed fewer credits at the time they enrolled in the learning community program. Both groups of students were highly oriented toward completing a college degree, though this was even more true of students in learning community programs.

Previous studies indicate that one of the attractive features of learning communities is the opportunity to make friends and build a sense of community on large commuter campuses. Our data suggest that the students in our institutions do not anticipate substantial difficulties making friends and this is not a factor differentiating students in learning communities. This finding is contrary to findings at the University of Washington and the University of Oregon, which suggested that students who enrolled in freshmen interest groups (FIG's) were more likely to be concerned about making friends and saw FIG's as a vehicle for overcoming this problem.

TABLE 2

CHARACTERISTICS OF STUDENTS IN LEARNING COMMUNITIES AND CONTROL GROUPS

ALL SCHOOLS
Winter and Spring 1988

	Learning Communities		Control Groups	
	Winter	Spring	Winter	Spring
Average Age	24.9	27.5	24.4	23.0
% Female	57%	57%	61%	52%
Number of credits completed	31.8	39.0	40.31	68.9
Highest degree expected: two year	6%	4%	17%	3%
Highest degree expected: four year or above	82%	96%	75%	96%
Expectation of difficulty meeting friends (1 to 5 scale with 1 = very easy)	1.49	2.0	1.48	2.1
Mean MID Score: start of quarter	3.051	3.11	2.94	2.81
Number of cases	320	248	286	149

Attitudes and Values of Students in Learning Communities

Tables 3 and 4 describe the attitudes and values of students in our learning community programs and the comparison classes. Institutional breakdowns of this information are provided in Volume III. It is clear that students in our learning community programs are not a self-selecting group of students with values and attitudes dramatically different from students in traditional classes. Indeed, what we see is a portrait of students who are generally pleased with their educational experience. Students in both the learning communities and the control groups have a strong interest in learning, a high commitment to education, and they report that they are hardworking and self reliant. In comparison with national studies of freshmen, the Washington students appear somewhat less focused on their own financial betterment and more oriented toward helping others.

The only statistically significant differences between students in the learning communities and those in the control groups were the following:

Students in learning communities were more likely to report enjoying challenge and a dislike for competition than students in the traditional classes.

Students in learning communities had slightly less positive attitudes towards education but they reported more feedback and attention from their instructors than students in the traditional classes.

Students in learning communities were more likely to report that they learn a great deal from others in school, an indication that they are more oriented toward collaborative learning.

Students in learning communities are less oriented toward financial reward than students in traditional classes.

Intellectual Development in College Students

One of the major instruments used in our evaluation research is the MID, the Measure of Intellectual Development. The results of the 1986-87 assessment are fully described in Occasional Paper #1, by Jean MacGregor, which is included in the Publications section of Volume II. These initial results demonstrated substantial gains in intellectual development for students in inter-disciplinary programs.

In the 1987-88 academic year, the addition of attitudinal data and comparison groups in traditional classes enabled us to further explore questions related to intellectual development and the MID. In particular, we were able to sort out some of the intervening factors that might explain the gains in MID scores--factors such as age, sex, and grade point average.

TABLE 3

VALUES AND ATTITUDES OF STUDENTS

ALL SCHOOLS
Winter 1988

Values and attitudes of students (Rated on a five point scale with 1=strongly agree and 5=strongly disagree.) Reported in mean scores	Learning Communities	Control Groups
I dislike competition	3.1	3.35
I have a strong interest in learning	1.4	1.55
I enjoy working with others	1.8	1.8
I tend to achieve my goals	1.88	1.92
I am satisfied with myself	2.6	2.69
I have a negative attitude towards school	4.3	4.5
I'm working as hard as I should be	2.5	2.6
I tend to put off completing things	3.0	3.1
I learn a lot from others	2.0	2.4
College has lived up to my expectations	2.25	2.34
I get sufficient attention from faculty	2.01	2.12
My teachers give me lots of feedback	2.27	2.47
I have few friends at this school	3.09	2.91
Being financially well off is important to me	2.49	2.26
Helping others is important to me	1.65	1.6
Being better educated for my children is important	1.83	1.76

TABLE 4

VALUES AND ATTITUDES OF STUDENTS

ALL SCHOOLS
Spring 1988

	All Learning Communities	All Control Groups
Values and attitudes of students (Rated on a five point scale with 1=strongly agree and 5=strongly disagree.) Reported in mean scores		
I dislike competition	3.3	3.5
I have a strong interest in learning	1.5	1.5
I am self reliant and motivated	2.0	2.0
I enjoy working with others	1.8	1.8
I tend to achieve my goals	1.8	1.8
I enjoy challenge	1.7	1.8
I am satisfied with myself	2.6	2.5
I have a negative attitude towards school	4.3	4.4
I'm working as hard as I should be	2.7	2.9
I tend to put off completing things	3.0	3.1
I learn a lot from others	2.0	2.3
College has lived up to my expectations	2.2	2.4
I get sufficient attention from faculty	2.0	2.0
My teachers give me lots of feedback	2.3	2.4
I have few friends at this school	3.2	3.4
Being financially well off is important to me	2.4	2.2
Helping others is important to me	1.7	1.8
Being better educated for my children is important	1.9	1.8

In general, we can say that students in learning communities tend to have higher entering scores on the MID and higher gains scores on the post tests. At the same time, it should be noted that there are some school-by-school and course-by-course exceptions to this relationship and some schools experienced exceptionally large gains. (We also need to note that administration of the MID in the 1987-88 academic year was a bit uneven with few programs administering the post-test and some problems with the students taking the essay seriously). It is also notable that students at all of the institutions are operating at a level of intellectual development that is assisted by a fairly explicit set of expectations and structure. Syllabi from the learning community programs vary considerably in the extent to which they provide this kind of explicit structure.

We also found the following trends in terms of attitudinal and value perspectives:

Students with higher MID scores were more likely to describe themselves as self reliant and motivated and they expressed a stronger interest in learning.

Students with higher MID scores were more likely to report they enjoy challenge and a tendency to put off completing things.

Students with higher MID scores were more likely to report that college lived up to their expectations, that they get a great deal of feedback from their teachers, and that they learned a great deal from others.

Students with higher MID scores were less likely to report a negative attitude toward education and that being well off financially was important to them.

The Influence of Age and Sex

Age and sex are also important factors in explaining differences in student attitudes and values. In general,

Men were more likely than women to express a negative attitude towards education. They were more likely to think they could achieve whatever they wanted and that being well off financially was important to them. Men were also more likely to report a tendency to put off completing things.

Women were more likely to express a dislike for competition, an enjoyment of working with others, a feeling that helping others is important to them, and the sense that they were working as hard as they could.

Older students were more likely to express a strong interest in learning, a high level of satisfaction with their education, and sufficient feedback and attention from their teachers. They were more likely to report that they learn a great deal from working with others, and they were more likely to report a high degree of self reliance and a feeling that they were working as hard as they could.

Grade Point Average

Grade point average is the other factor associated with significant differences in student atttiudes and values, though this was a more important factor in the winter than the spring sample.

Students with higher grade point averages are more positive towards education, enjoy challenge and competition, and report that they are working up to their potential. They also were more likely to report that college is living up to their expectations.

THE 1986-88 EVALUATION EFFORT WITH FACULTY AND ADMINISTRATORS:

WHAT WE LEARNED ABOUT SUSTAINING AND IMPROVING LEARNING COMMUNITY PROGRAMS

The Washington Center should certainly be understood as a dynamic organization that is change oriented. Describing the dynamics and extent of this change process is a challenge. Learning from the process is our goal.

In the past four years more than a dozen institutions in Washington have experimented with new curricular designs, all loosely described as "learning communities." The scale of experimentation varies widely. Some institutions offer a single learning community program each year, while others offer a dozen or more each quarter. Learning community work involves faculty from a variety of disciplines and areas; programs have been offered in transfer, developmental and vocational areas. The number of faculty involved in the learning community effort varies from campus to campus: in some cases, the learning community effort is small and localized; in others, it broadly represents the entire spectrum of the campus.

Our efforts to establish more effective approaches to undergraduate education in general, and our work with learning communities in particular, must be seen as emergent and developmental. While learning communities have a relatively long history on some campuses such as Evergreen and Seattle Central, they are only beginning on others. We recognize that these programs are at different stages of development with somewhat different concerns. We also recognize that each institution and each program has its own somewhat unique course of development.

Nevertheless, there is a great deal that we can learn from one another, and one of the central purposes of the Washington Center is to serve as a vehicle for the transfer of knowledge. In that spirit, this section of our self study is written as a kind of emergent state-of-the-art study of collaborative learning community efforts in this state. The following insights, issues, and recommendations for improvement represent the major threads that emerged from our extensive debriefing interviews with faculty teams and from conversations with administrators involved with learning community work. These insights provide much food for thought as we move ahead in our common efforts to improve undergraduate education.

The following pages summarize some of the most important insights that emerged in terms of key elements of success in learning communities, and offers a schemata of the developmental challenges and stages that accompany the change process underlying these efforts.

ELEMENTS OF SUCCESSFUL LEARNING COMMUNITIES

"Learning communities" is a broad term for any one of a variety of approaches which horizontally link together several existing courses--or actually restructure the curricular material entirely--so that students have opportunities for increased depth and integration of the material they are learning, and more interaction with one another and their teachers as fellow participants in the learning enterprise. The experiences with developing communities, at about eighteen institutions in Washington state, have illuminated these elements as key to the success of these model programs:

The learning community itself

* There is a central theme or question, around which the learning community program is focused.

* There are high, but clearly stated expectations of students, but there is also willingness to shift program emphasis if needed.

* There is a faculty team that works effectively together.

* There is an emphasis on student involvement: active learning, frequent writing, and work in collaborative groups.

* Program themes are developed through reading and discussion of challenging, primary texts.

* Usually, students meet once or twice weekly in seminars to discuss the texts.

* Faculty solicit frequent student feedback on the substance and process of the program; generally, there is a formal mid-quarter assessment of the learning community.

* Faculty meet weekly in faculty seminar to work together on program texts, ideas and themes. This is purely intellectual time together, not a planning or logistics session.

The learning community effort in the institution

* The learning community program builds good relationships with support services on campus, most especially those individuals who do academic advising.

* The learning community program has a consistent, strong publicity and recruitment effort.

* There is a locus of responsibility for long-term planning and support of learning community development and staffing.

STAGES OF ORGANIZATIONAL DEVELOPMENT*

Developmental Stage	Critical Concern	Key Issues
Birth	To create a new organization	What to risk
	To survive as a viable system	What to sacrifice
Youth	To gain stability	How to organize
	To gain reputation and develop pride	How to review and evaluate
Maturity	To achieve uniqueness and adaptability	Whether and how to change
	To contribute to society	Whether and how to share

*Adapted from Lippitt & Schmidt, "Crises in Developing Institutions," Harvard Education Review, Nov.-Dec. 1967, pp. 102-112

Planning for and Staffing Learning Communities

1. **Coordination of learning community planning.** A clear planning and coordination process for learning community programs is essential. Washington schools have developed different models for faculty to use in submitting curricular ideas. Schools with multiple learning community model programs often have special needs for a coordinating structure in the form of a single individual or a steering committee. This is particularly an issue when learning communities are offered in a number of different divisions. In our interviews we found that faculty sometimes appear confused about channels of communication, ongoing institutional commitment and coordinating mechanisms. Some faculty members report that the "the learning community planning structure is so informal it's invisible to me." This can undermine the initial enthusiasm many faculty members feel for learning communities.

2. **Continuity in staffing.** With the exception of The Evergreen State College, which offers year-long programs, and Bellevue which encourages one carry-over faculty each quarter, most schools staff learning communities with different faculty each quarter. While this is desirable for enabling many faculty members to teach in these programs, continuity over two quarters (or years) can be desirable as well--especially as learning community programs are introduced to different student populations. Faculty members in the business program at Seattle Central report that the continuity of their team over two quarters was very valuable. Introducing more continuity may increase carry-over enrollment and lessen planning time as well.

3. **The use of part-time faculty.** Many part-time faculty at the community colleges are interested in being part of learning community programs. Several schools have effectively used part-time faculty (Bellevue, Green River, and Seattle Central). In some cases, the use of part-time faculty raises equity questions and morale problems for the full-time faculty. Since the reliance upon part-timers is so extensive and driven by budgets in the community college system, it is unlikely that this issue can ever be fully resolved. It appears, however, that openly discussing the issue and the budgetary parameters would help. Some faculty members reported that they seldom had clear explanations of the planning parameters. As a result, they continued to negotiate and feel disappointed.

4. **Faculty exchanges to build inter-institutional teaching teams.** There is a growing pattern of schools helping one another get started on new learning community programs through faculty exchanges and through focused advice and feedback from "kibitzers." This seems to facilitate the successful initiation of these efforts on new campuses. The availability of exchange faculty to play this role should be highlighted. Faculty exchanges are also terrifically revitalizing experiences for faculty.

5. **The involvement of out-lying schools in planning efforts.** Faculty members who attended the Washington Center's spring planning retreat reported the rich experiences they had doing planning work in concert with representatives of other schools. It is difficult, though, for entire teaching teams from the more far-flung institutions to arrange to attend

these events. Many of these teams are developing programs in isolation: they aren't benefitting from the feedback they would naturally get from colleagues elsewhere, nor are they able to share some very fine work of their own.

6. **Small Departments.** Faculty in small departments are often interested in participating in learning community programs but they cannot be easily freed up from their usual courses.

7. **Space.** Finding adequate space is sometimes a problem for large learning communities. A designated coordinated studies room such as the one at Seattle Central is ideal, since the room can be used for large or small groups. With this kind of space, students in learning communities--even on commuter campuses--are more apt to spend larger amounts of time at school: a comfortable meeting place with a coffee pot helps.

8. **Class size.** Class size is a perennial issue. Learning communities thrive partly because they operate largely within usual student faculty ratios. Still, existing enrollment levels are unrealistically high, especially for developmental classes. Faculty who have planned a joint program can be disappointed if minimal enrollment forces a member of their team to be reassigned. There is probably no general solution to this problem, but realistic appraisal of the different learning community models and better assessment of probable student demand might help.

Recruiting of Students into Learning Communities

9. **Sharing of promotional materials.** The schools participating in the Washington Center have developed a variety of excellent promotional materials that should be widely shared. Many good ideas are included in the resource materials in Volume III of this report.

10. **Clarity about responsibility for student recruitment.** For students, the learning community or coordinated studies model is and will continue to be a foreign format. Recruitment of students into these programs will always present itself as a need. On many campuses, faculty seem unclear about who should own the recruiting job, or who should help with it. As we have learned, students learn about learning community programs from multiple sources. It is critical to build awareness of and understanding of the learning community approach throughout the other faculty and the campus support services. The Quanta Learning Community at Daytona Beach Community College in Florida uses a video tape as its principle recruitment tool: the video is shown not only at the student advising center but also in local high schools.

Issues of Curriculum and Pedagogy

11. **The sciences in coordinated studies.** Learning community programs weave humanities and social sciences together more than they do social sciences and natural or physical sciences. At schools where sciences have played a role in the learning community, the faculty have been eloquent about its importance in the coordinated studies context.

12. **Adaptability of learning communities to diverse areas.** Learning community programs can be successfully applied to a variety of curricular areas including developmental, transfer, and occupational areas. They are also suitable as an honors option and as an approach to a core curriculum. There are many fine examples of successful models in this state.

13. **Mid-quarter assessment.** Many faculty felt that a mid-quarter SGID and mid-quarter conferences with students were valuable. The SGID is an efficient and valuable mid-quarter evaluation instrument that could be used in a more systematic way in all programs. It is notable that most of the programs with serious attrition problems did not use the SGID, or any mid-quarter whole-program evaluation.

14. **The English Composition issue.** Most learning communities embed English 101 and/or English 102 in their programs. Many administrators regard this as necessary to sustain the enrollment, and desirable from the standpoint of promoting writing across the curriculum. There are, however, ongoing issues among the faculty--especially the English faculty--about whether this is desirable. Partly, this is an issue of comparability and the wisdom of teaching students at different levels of preparation; and partly it is an issue of having the sole composition teacher handle the full load of students. This is an ongoing issue that deserves more direct discussion between the faculty in different institutions. Proficiency-based approaches might also be explored in these programs. In some institutions there is probably enough interest to run learning community programs with second rather than first year English courses included.

15. **Weekly substantive faculty seminars.** These are a key element in successful collaborative learning communities; a time when the teaching team comes together for intellectual purposes.

16. **Focus.** A key element in learning community design is a theme, a central question or set of questions, or a problem. This provides the focus around which multi-disciplinary material can be presented and is vital to provide curricular coherence.

17. **"Collaborative Teaching".** "Collaborative teaching" means different things depending upon the learning community design used. Clearly understanding the variations possible is important in recruiting faculty to learning communities and in accurately conveying teaching expectations. Collaborative teaching in Washington Center programs almost never means "take-turn teaching"; it usually involves a more extended collaborative teaching and planning process.

18. **Kibitzers in the planning process.** The Washington Center provides kibitzers to individual campuses to facilitate the planning process. The schools that have taken advantage of this service report that it is helpful. Only a few of the participating institutions have used kibitzers; it is an opportunity that we need to promote. Spokane Falls Community College has effectively used internal kibitzers to preview the learning community experience in the quarter before their fulltime teaching begins.

19. **Planning, flexibility and orthodoxy.** Learning community designs are very flexible. Success often depends upon the right mixture of flexibility in terms of mid-course corrections and sufficient advanced planning. Several programs incorporated the feature of producing a new detailed syllabus each week--a good example of effectively combining extensive planning with flexibility. Other programs have changed direction drastically mid-way through the quarter: in these instances faculty teams have remarked, "We never would have expected this, and are so glad we changed course." Faculty report a tendency to overplan. With greater confidence, they come to enjoy and allow more surprises.

There will always be a tension between faculty members' very real needs for time to plan and the budgetary lack of planning money. Unless faculty members put in the time to discuss the big ideas, these programs are difficult to teach--or are somewhat arid. As one faculty member put it, "without that fungus or yogurt, these programs stay flat. The faculty need to model synthesizing and expanding their ideas as the point of it. Coordinated studies are beginnings."

20. **Structure and expectations.** The learning community programs vary widely in terms of the degree of structure and clarity of expectations that are conveyed to students. The MID scores seem to indicate that students would benefit from greater clarity and explicitness. While students are quite supportive of the teaching approach, they express some initial anxiety about various aspects. Green River's Tool Book and the syllabi and statements on "how to seminar" used at North Seattle and Edmonds provide good examples of how expectations and tips for success can be conveyed to students.

21. **Contradictions in approach.** Collaborative learning and teaching is new for nearly all of us. To a greater or lesser extent, most of the curricula contain some contradictions in terms of truly fostering collaborative learning. These range from the way the writing instruction is carried out, to the way projects and grading are undertaken. The programs could probably benefit from some applied workshops on collaborative learning methods.

22. **Difficulties associated with highly opinionated students.** The highly interactive environments, including seminar, create situations where students find themselves at loggerheads with each others' experiences and ideas--sometimes touching off acrimony and lack of openness to new perspectives. Developing students' abilities for "benign listening" (training students to suspend judgment and listen for understanding, if not agreement) were seen as a key factor and goal in many of these programs.

23. **The use of primary texts.** Most learning community faculty regard the use of primary texts--and the holding of seminar sessions for exploration and analysis of them--as crucial. Student reading speeds were much slower than faculty anticipated. The volume of reading was sometimes too great. Assessing students' reading speeds and/or holding workshops on reading strategies would seem appropriate for many programs.

24. **Seminars.** Seminars are a critical component of learning communities and also a source of acute anxiety for students and faculty. The Washington Center should run more workshops on seminar strategies.

25. **Conflict & Controversy.** Controversy, conflict, and fear of conflict were a factor in a number of programs and a concern for both students and faculty. Conflict is almost a given in highly interactive settings; it can become a real barrier to learning. The lecture-dominated class usually hides this troubling aspect of life. Learning communities can liberate it to everyone's discomfort. Having an outside "ear" or mediator was sometimes valuable in allowing students and faculty to work through these issues and see them as healthy and natural. In some cases racial tensions and cultural differences were an aspect of this, sometimes with faculty operating with quite erroneous assumptions about student values and motivation.

Collaborative learning is also new to faculty and conflict can result. In several programs, faculty members who were previously friends had a falling out in the process of teaching together. More clearly discussing personal style, expectations, and teaching philosophy, and the writing of faculty covenants may facilitate the process of collaborative teaching. The Washington Center staff and kibitzers can also assist in conflict resolution.

26. **Student study groups.** These were effectively used in a number of programs. Many study groups were organized and sustained by the students themselves.

27. **Fear of failure.** Learning communities put students in an unusually public learning environment. Many students report extreme anxiety about failure. In a number of programs various ways of discussing this issue were raised from showing the film "Build Your Own Chute" to using personal journals. Sensitive faculty report that they came to know their students in ways they never had previously and that they came to see problems that had previously gone undetected. They also reported a need for help in understanding some of these issues.

28. **Group Cohesion.** Several programs built in or will build in early vehicles for building groups cohesion such as the ROPES course at Green River and the pre-session in the Tacoma Community College-Evergreen Bridge program.

<u>Student support in learning communities</u>

29. **The involvement of student services.** The various student services offices, especially academic advising, can be valuable resources for planning and recruiting for learning community programs.

30. **The involvement of library personnel.** This is extremely valuable.

Grades

31. **Grading and transcripting.** Grading is an ongoing issue in many programs. Issues resolve around whether to give one grade for all aspects of the program, which faculty should award the credit, whether partial credit should be given, how much to weigh participation and collaborative work, how closely the content need parallel traditional course content, etc. Discussing these issues is critical for the faculty team. Learning community faculty report that grading is a very difficult issue that can introduce undesirable tension among students in an otherwise successful program. North Seattle introduced an effective method of defusing this tension. Green River piloted an in-progress evaluation system that rewarded ongoing collaborative effort heavily.

32. **Transcripting learning community credit.** Most schools transcript the learning community programs with traditional course titles. There is some interest in discussing this issue further with the Inter College Relations Council, the state committee that oversees transfer.

Program Evaluation and Documentation

33. **Locally-based evaluation.** The evaluation effort undertaken this past year outstripped the Center's staffing resources and failed to sufficiently inform the teaching process. The Center plans to encourage more locally-based approaches, and to provide technical assistance with several kinds of evaluation approaches.

Ongoing evaluation is very important. On a number of campuses it may be possible to locate evaluation support in an existing administrative office to allay faculty concern about work overload. Nonetheless, it is important that faculty remain centrally involved in all evaluation efforts.

34. **Program documentation.** On each campus, documenting the learning community work would be useful, even if it were a simple library archive of syllabi. Some programs have assembled detailed program histories, and even "How To" handbooks for other faculty to use.

General Institutional Support of Learning Communities

35. **Sharing the glory.** Some schools evidence minor problems as new programs become the "property" of the larger faculty and not just the purview of those supporting them at the beginning. This can be a critical stage in the institution in terms of creating a broad sense of institutional ownership and community. The continuing success of this effort depends upon centrally involving a broad cross section of faculty in each institution and overcoming natural and historical boundaries and jealousies.

36. **Paying attention--as an institution--to what happens and sharing the results.** One of the great values of learning community efforts has been the feeling faculty experience of being valued in their institution, as faculty peers and key administrators become interested in one another's work. After experiencing this "high," some faculty reported that no one asked them afterwards how the quarter went. These faculty members also

appeared unaware of what others in their institution were doing in other and previous learning communities. There seemed to be a pronounced contrast between the sense of accomplishment and empowerment faculty members feel initially and the lack of institutional follow-up. Institutions would probably benefit from some regular end-of-quarter gathering in which faculty colleagues and academic and student service administrators hear about the programs' progress and the results. This would result in a greater sense of closure and recognition, and increase the transfer of knowledge. It would also help alleviate some of the amnesia that occurs with rapid turnover in the teaching teams.

At several institutions, the learning community teaching team has held a debriefing session at the end of the quarter with the teaching team for the following quarter--an effective procedure for passing along insights and advice. Yearly retreats have also proven useful on a number of campuses. Various models for generalizing the insights should be found.

37. **Ongoing leadership development work.** In a number of institutions, the initiation of learning communities has become an occasion for a serious and positive revitalization of the institution, with new levels of collegiality between faculty and between faculty and administrators. It has produced a sense of empowerment on the part of faculty and engaged the energy of many of the leaders in Washington colleges and universities. A number of faculty experience this process with a sense of empowerment, but they also experience some role confusion. They become energized to make a larger contribution and don't know quite where it can happen. Finding new roles for these individuals is important.

38. **Administrative support.** Active administrative support of learning communities is critical to their success. Deans play a particularly crucial role. On a number of campuses special efforts have been made to keep the President and Board of Trustees informed of these new curricular endeavors through presentations and written reports. These efforts are very valuable.

BRIGHT IDEAS

In the past four years there has been widespread experimentation with a variety of learning community-type programs involving collaborative teaching in Washington state. The following is a sample of some of the bright ideas that have been developed and are worth sharing. More detail on many of these ideas is available in Volume III of this report.

1. From **Bellevue Community College**:

- Poster announcing learning community offerings for an entire year.
- Effective day-long planning retreat, and planning process for learning community offerings and staffing.
- Use of end-of-quarter dramatic presentations by student teams as a means of pulling together program themes in a creative way.
- Previous teams meet and debrief experiences with members of next planning team
- Carryover students from one quarter to next in learning community present the program to new students and provide orientation
- Community shared potluck breakfasts held during first half of quarter once a week.
- Last session of program was a spontaneous community sharing of what program meant to each student
- Mid quarter SGID in each individual seminar
- Field trips to museums, geological sites, etc., using the school's athletic bus.
- Faculty go into possible feeder classes to recruit students
- Use of one veteran as a carryover faculty in each new coordinated study program
- Clear process and criteria to help select potential coordinated studies programs that became part of application process
- Form for students to respond to each aspect of the program and suggest improvements.
- Each seminar leader reponsible for responding to student writing regardless of discipline ; writing across the curriculum

2. From **Eastern Washington University**:

- Experimentation with Freshmen Interest Groups
- Women's Studies Across the Curriculum projects

3. From **Edmonds Community College**:

- Use of exchange faculty from North Seattle CC to get started on coordinated studies.
- Very effective syllabus, small recruiting booklet, and statement of expectations
- Creation of a "how to" handbook for future faculty interested in teaching in coordinated studies programs.

4. From **Everett Community College**:

- Initiation of a model year-long learning community program for re-entry women.

5. From **Green River Community College**:

- The Student Tool Kit (Spring 88)
- Use of simulations in coordinated studies
- In progress collaborative grading methods
- Group projects
- The production of new weekly schedules that allow the program to readjust to student needs
- Successful use of part-time faculty in coordinated studies
- Effective integration of sciences
- Requests for Washington Center kibitzers each quarter to help the team brainstorm program focus
- Summer coordinated study program for high school students
- Brochure announcing the entire year's coordinated studies offerings.

6. From **Lower Columbia College**:

- Strong efforts at promoting integrative studies.
- Integration of liberal arts with health and business curriculum
- Very systematic cross-institutional effort to build consensus about integrated studies

7. From **North Seattle Community College**:

- Brochure describing learning community offerings for an entire year.
- Developing learning community programs in vocational and developmental areas.
- The inviting of senior administrators to visit the learning community and learn of its emphasis and progress.
- Selecting exams questions verbatum from study questions
- Use of open-book, open-note exams
- Use of student study groups to work on study questions before examinations
- Use of small collaborative groups after films or lectures to raise and discuss questions about the film or lectures in a structured format

8. From Seattle Central Community College:

- Coordinated Studies group composed of over 50 faculty, administrators and staff which, with a faculty sub-committee, approves proposals for programs
- Program for ESL students using part-time faculty
- Diverse learning community announcement posters, all designed in the same format
- Large classroom space dedicated to coordinated studies program
- Learning community program in the Business & Commerce division for students needing developmental work
- Involvement of the cooperative education department with the business program so that students experience success in applying skills in a variety of job settings
- Learning community program in allied health for developmental students
- Involvement of cooperative education and student support courses (how to study, career exploration, etc.)
- "How To" handbook for planning a coordinated studies program
- Developmental English linked with college transfer social science course
- Inclusion of student services staff at coordinated studies meetings in order to include their resources for speakers, films, and general promotion of the program
- Linked Science and English 102 classes
- Allied Health Planning Retreat for all faculty interested in design of core curriculum for vocational area
- Video-taped segments of coordinated studies classes for orientation, advising, and registration areas
- Learning community showing similarities between learning English and math (developmental)
- Faculty Institute for all Seattle Area community colleges on benefits of coordinated studies
- Faculty presentations on coordinated studies throughout state and several other sites (New Orleans; Washington D.C.; Orlando, Florida; Portland, Oregon; Chicago; Hawaii; Columbia, S.C.; and Dallas)
- Two institution-wide planning retreats per year to sustain and improve model
- Surveyed business faculty "not interested" in coordinated studies for a sharing of ideas
- End-of-quarter open house wherein students presented projects to faculty, staff, and their <u>families</u> to broaden the community
- Use of narrative evaluations with end-of-quarter conferences in addition to grades in learning community programs
- New curriculum integrating vocational, college transfer and law-related occupations
- Business and Industry core curriculum integrating English, science, drama, math, and technology
- Evening coordinated studies program for visual and applied vocational students

- Program evaluation for two-year period
- Recruitment brochure showing yearly offerings
- Faculty Reading Seminars to help faculty continue sense of community (especially when they are back to teaching traditional courses)
- Portfolio and compilation of students' best work
- Mentorship for new faculty by "old" coordinators
- Faculty for fall program, "Televised Mind," videotaped syllabus and class expectations
- Extensive "archiving" so that persons interested in model have access to all previous programs.

9. From **Shoreline Community College**:

- Extensive development of the linked course idea
- Initiation of an institution-wide critical thinking program
- In coordinated studies program, involvement of a librarian as one of the teaching team.
- Weekly Friday afternoon evaluation meetings (both faculty and students attending and contributing) as a way of continually evaluating the program.

10. From **Spokane Falls Community College**:

- The concept of using a faculty kibitzers/part-time observer in the coordinated studies program the quarter before that person teaches in one, to gain familiarity with the approach.
- Extensive program documentation.

11. From **Tacoma Community College-Evergreen Bridge Program**:

- Successful program for recruiting and retaining minority students
- Use of personal journals
- Effective community speakers series
- Year-long curriculum with progressive Perry-like focus on personal identity (Fall) to larger societal commitments (Spring) with projects reinforcing this focus.
- Effective integration of library research methods, career counseling, and study skills.

12. From **University of Washington**:

- Effective use of instructional support services (Center for Research and Instructional Improvement) to support Freshman Interest Groups and the development of a good evaluation design, and training system for peer advisors.

13. From **Yakima Valley Community College**:

- Development of "triads," clusters of three courses for which students enroll simultaneously.
- Commitment to monitoring student retention and persistence in college after learning community experiences.
- Effective use of case studies for discussion and concept development.

NEXT STEPS

The remaining questions of this analysis focus on what the Washington Center should do to continue to nurture and support the efforts that it has initiated, and how two tensions inherent in the center's work are best handled. These two tensions can be described as, 1) the Center's inclusiveness vs. its responsiveness; and 2) the tension between the Center taking the primary initiative vs. just providing the general framework for the work of the participating institutions.

At its planning retreat in February 1988, the Center's planning committee agreed that the short term focus of the Washington Center should revolve around the continuing development and support of learning community model curricula and of pedagogies that encourage active and collaborative learning. It also became clear that the Washington Center was at a point of needed expansion in staff, in terms of taking on additional responsibilities. One solution may be a released-time approach involving faculty in member institutions.

In terms of better supporting learning community model programs, desirable future directions include additional resource-sharing among the institutions, further development and expansion of the kibitzer system, and the development of a Washington Center "associates" program for cultivating the development of trained local faculty leaders. Particularly useful would be the offering of additional small seminars and workshops on the model of the "Teaching in Coordinated Studies" (February 5th workshop) that bring newcomers and veteran faculty together to talk about effectively teaching in learning communities. The Washington Center needs to work on providing more theoretical and practical information on collaborative learning, active learning, writing across the curriculum, and related topics to faculty teaching in the learning community programs.

Encouraging more inter-institutional faculty exchanges is one good way of giving newly established learning communities the benefit of a more experienced faculty perspective. Building wider institutional commitment to the faculty exchange opportunity would be beneficial, especially between institutions other than Evergreen. As planning to support learning communities becomes more well-established with longer lead times, negotiating faculty exchanges could become difficult. This is especially true in schools where there are substantially more faculty wanting to teach in these programs than there are spaces. The faculty exchange effort would benefit from more documentation in the form of faculty assessments of the experience. There is also an emerging issue of concern in terms of funding the housing subsidy for this effort. These subsidies are currently funded by the Burlington Northern Foundation with a grant of $22,000. Deploying money out of the Center's current state budget to cover this expense would be difficult; additional private funding or additional state funding will be needed to replace the current Burlington Northern grant when it is expended.

Conferences are probably the most time consuming aspect of Center staff time, but they are valuable aspects of the Center's work. They provide an opportunity to "showcase" local and national talent on topics related to the Center's work. They provide much of the theory base and applied examples that undergird the collaborative learning effort as a whole. At the same time, it should be acknowledged that the conferences serve several different audiences and functions. Only about half of those attending the Center's large conferences are involved in the learning community model programs and faculty exchanges. The large conferences, then, serve to broaden the audience and potentially the focus for the Center's work, especially into the four-year college and university network where the interest in learning communities and faculty exchanges is not as extensive.

The Center staff and planning committee are sensitive to the tension in the Center's work, in terms of focus and scale; there is indeed a continuing dilemma about balancing Center staff commitments and limited resources. In terms of the Center's conference commitments, we feel the answer is to stay close to our audience and rely extensively on collaborative planning of the conferences with a flexible focus. A multiple level conference focus is likely to continue in the coming years, with a few large conferences serving a wider audience, and numerous small interactive conferences focused on supporting the model programs. Occasionally, other related topics will also emerge. In her extended visits to four-year institutions in eastern Washington early in 1988, Jean MacGregor discovered that many faculty and administrators involved in reviews of undergraduate general education were eager to learn what other Washington schools were planning or carrying out. These conversations have led to plans for a winter quarter retreat in 1989 on general education reform. In this fashion, The Center will continue to identify and shape its conference offerings around stated needs and interests of the institutions and people it serves.

The Washington Center's Seed Grant Program is a relatively small proportion of its current budget ($25,000 of the $200,000 annual budget), but it has been important in drawing new institutions into the Washington Center. With a relatively small outlay of funds, the seed grant program has attracted a number of proposals that have wide transferability and promise. In the last round of proposals nearly fifty per cent of the proposals were funded. A number of the proposals were clearly outside the Center 's guidelines. At its last meeting and in response to the Planning Committee's advice, the Seed Grant Review Committee tightened up and clarified its proposal requirements to focus more closely on learning community development and inter-institutional faculty development. In the future, the Center may find it effective to solicit some priority projects rather than deploying all of its seed grant funds through an open competititon. We find that proposals frequently spring from face-to-face conversations and brainstorming work with Center staff, so need to expand our institutional visits and our efforts to raise awareness of the Seed Grant Program.

For the Washington Center, providing resources and technical assistance can be both a gold mine, and a potential swamp. Gathering and disseminating resources is a key element of the Center's work. However, the Center's focus is not on research, and the potentially limitless focus of its work could easily overextend its capacity. It is important for the Center to stay clearly focused in this aspect of its work, in close collaboration with its member institutions. It needs to pay particular attention to developing a means of searching out talent and resource people within Washington state, and to providing more of a clearinghouse service than an expertise/problem-solving one. It is here that the expansion of "kibitzers" and the development of a cadre of "associates" will be the most helpful.

As with any evolving and innovative organization, we see the key issues for the Washington Center to be ones of scale, style, and flexibility, as well as the avoidance of those twin demons, bureaucratization and fossilization. We must continue to stay well connected to both the national and state issues, and national and local expertise. One member of our planning committee maintains that we have to stay "hot" to maintain interest. Another counsels to stay "light on our feet," that is, responsive to our consortium audience and the national conversations. Perhaps the most incisive comment came from one of our planning committee who said "the Center works, quite simply, because it has turned teachers into learners and because it set up an appropriate structure to keep that energy burning." We agree.

APPENDIX

A. Washington Center Planning Committee

B. Washington Center Evaluation Committee.

C. The Washington Center: A Grass Roots Approach to Faculty Development and Curricular Reform, To Improve The Academy, October, 1988. Barbara Leigh Smith.

D. Design and Implementation of Four Learning Community Models, Proceedings of the National Conference on Student-Centered Learning, May, 1988. Jean MacGregor.

E. Intellectual Development of Students in Learning Community Programs 1986-87: Washington Center Occasional Paper #1. Jean MacGregor.

F. Learning Communities: A Paradigm for Educational Revitalization, Community College Review, Spring 1988. Barbara Leigh Smith and Rosetta Hunter.

WASHINGTON CENTER
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The Washington Center

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The Washington Center: A Grass Roots Approach to Faculty Development and Curricular Reform[1]

Barbara Leigh Smith

The Evergreen State College

Four years ago, an effort began in Washington State that dramatically altered our perceptions of what's possible in terms of revitalizing faculty and improving undergraduate education. It began modestly with two colleges working together; their efforts produced a model that became the foundation for a statewide consortium devoted to improving undergraduate education. Known as the "Washington Center for Improving the Quality in Undergraduate Education," the Center was conceived as a small scale, grass-roots-oriented effort emphasizing both faculty and curriculum development efforts. In just two years' time, the consortium tripled in size and was institutionalized with funding from the State Legislature. With headquarters at The Evergreen State College, it now serves 35 member institutions, both two-year and four-year colleges and universities and both public and independent institutions.

The story of the Washington Center raises important questions about our approaches to educational revitalization. It suggests that relatively low cost approaches are available to create more coherent curriculum and more vital academic communities.

This article provides a historical overview of the Washington Center, a description of its current structure and its crucial features, and an analysis of its implications for educational reform and faculty revitalization. We believe the Washington Center offers a promising low-cost high-yield approach to educational improvement that could work in any state or region.

[1]I am grateful to Jean MacGregor, Valerie Bystrom, and Pat Williams for their helpful comments in revising this manuscript.

From *To Improve the Academy: Resources for Student, Faculty, and Institutional Development*, Vol. 7. Edited by J. Kurfiss, L. Hilsen, S. Kahn, M.D. Sorcinelli, and R. Tiberius. POD/New Forums Press, 1988.

Origins of the Washington Center

The Washington Center's beginnings reflect a combination of fortuitous circumstance and creative entrepreneurship. Its origins trace back to February 1984, when a dean at Seattle Central Community College introduced his Instructional Council to the curriculum at The Evergreen State College, a college noted for its interdisciplinary curriculum and collaborative teaching. After spending a day visiting classes, the members of the Seattle Central Instructional Council were enthusiastic about Evergreen's approach and hoped to initiate a similar program to revitalize the liberal arts. One week after visiting the Evergreen campus, Seattle Central's Dean Ron Hamburg called to ask whether he could send two of his faculty members to Evergreen for a term to gain additional expertise with team teaching in one of Evergreen's integrated programs. Though spring quarter was only a month away, this was quickly arranged. Valerie Bystrom and Jim Baenan spent the next ten weeks at Evergreen team teaching with Thad Curtz, an Evergreen veteran, in a program called "Thinking Straight," which included literature, informal reasoning, anthropology, and writing.

Based on their experience at Evergreen, Bystrom and Baenan returned to Seattle Central to initiate an interdisciplinary program there. To assist the program in its early stages, two Evergreen faculty joined them while two other Seattle Central faculty journeyed to Olympia to continue the faculty exchange. They were the first in a long series of exchange faculty who would establish steadily deepening relationships among a variety of different institutions and faculty in Washington.

The new program at Seattle Central provided students and faculty with the opportunity to explore the theme of individualism in America through an intensive fifteen credit program taught by four faculty combining work in political economy, history, anthropology, literature, and the arts. The program was an immediate success. Students experienced a heightened sense of engagement and commitment, and retention was

high. The most surprising aspect of the effort, though, was its enormous impact on faculty.

It was immediately and abundantly apparent that we had stumbled onto a highly effective low cost model for *both* curricular reform and faculty revitalization. In fact, the initial Seattle Central-Evergreen collaboration proved so appealing that neighboring institutions quickly became interested. Word spread through friendship networks in the community college system and a number of faculty members at other campuses expressed interest in establishing similar curricular efforts. Faculty exchanges were arranged among the various Seattle community colleges and were instrumental in initiating new programs at Bellevue and North Seattle Community College. Lower Columbia College, far to the south, sent an exchange professor to Evergreen, and the University of Washington, Western Washington University, and Seattle University joined as well.

Fueled by a $50,000 grant from the Exxon Foundation to expand the model piloted through the Seattle Central-Evergreen relationship statewide, the Washington Center was launched with a half-time staff coordinator and modest funds for seeding projects, but interest was running so high, it quickly became apparent that we had a low cost model with large potential.

By the Spring of 1985 a growing constellation of institutions had come together to participate in the Washington Center. Although state funding was not provided initially, the State Legislature formally recognized the Washington Center in 1985 in the notes accompanying Evergreen's budget and other institutions were encouraged to participate. From 1985-1987, the Center's work continued to grow and prosper with the initial support from the Exxon Foundation and additional support from a $75,000 grant from the Ford Foundation. Ford saw the Washington Center as a model collaborative effort to build ties between two and four year colleges.

The Center's Structure and Administration

By 1987 the consortium tripled in size with 32 participating institutions and new model programs in place at more than a dozen colleges and universities. After an unprecedented show of inter-institutional support from all levels of the participating institutions, the State provided funding in July 1987 with an annual budget of $200,000. Half of these funds are pass-through funds to the member institutions to support a small seed grant program, faculty exchanges, travel, and seminars; the remaining funds support a small central staff of 2 1/4 at Evergreen. The Center's style

and focus remains adamantly face-to-face, small-scale and centered on the development of new curricular approaches (called learning communities), the arrangement of faculty exchanges, and the encouragement of collaborative efforts at building curricular coherence.

The Center's success reflects an unmet need for community and collegiality and a hunger for a kind of authentic dialogue that is too rare in many of our institutions. Because we believe in the importance of community, we prize our first-hand, face-to-face relationships with key faculty and administrators in each of our member institutions. The Center's Assistant Director, Jean MacGregor, and I have built creatively on our previous professional contacts in Washington state and the Northwest: institutional committees, the Pacific Northwest Writing Consortium, inter-college networks as diverse as counselors associations, developmental education groups, environmental studies associations, and a statewide community development network. We see ourselves as networkers building linkages, both new linkages and linkages between existing organizations with inter-related interests around the common goal of improving undergraduate education.

We use a variety of approaches to maintain firsthand contact with our participating schools. Center planning meetings, conferences,and seminars are carefully rotated to various sites around the state. We publish a quarterly newsletter to build connections. The newsletter features notable efforts in undergraduate education throughout the state, describes who is taking part in faculty exchanges, and indicates where model programs are taking place. A planning committee, consisting of pairs of faculty and administrators from eight of the participating institutions, oversees the work of the Washington Center. On this committee as well as others, attempts are made to preserve a good balance of veterans and newcomers. To increase local ownership and involvement, we create short and long term committees comprised of faculty members and administrators to plan almost all our efforts and events.

We also travel extensively throughout the State to maintain personal contact with faculty members and administrators on each campus. At the end of each quarter, we conduct team de-briefings of the faculty teams teaching in the interdisciplinary programs to maintain firsthand contact with the faculty and the programs.

Since we see face-to-face relations as crucial to the Center's success, we are concerned about the increasing size of the organization, sometimes half-jokingly talking about being buried in our own success. We're exploring various models for retaining the Center's grass roots personal contact while building more localized leadership on participating campuses.

Crucial Features of the Model: Structural Reform

Two closely linked features define the Washington Center's approach to educational improvement: first, structural alteration of the educational environment into "learning communities" to enhance teaching and learning; and second, faculty exchanges into collaborative teaching situations. In this section we'll discuss structural change. The next section discusses the Washington Center's model of faculty exchanges.

A variety of different curricular models – all commonly referred to as "learning community" models – are being piloted by the colleges and universities associated with the Washington Center; these range from linked courses to the fully integrated coordinated studies program initiated at Seattle Central Community College and widely adopted at other institutions. "Learning community curricular designs" structure the educational environment to provide greater curricular coherence, a sense of purpose and group identity, more opportunities for active learning, and more intensive interaction between students and faculty. They redefine faculty roles and "encourage faculty members to relate to one another both as specialists and as educators...and help overcome the isolation of faculty members from one another and their students" (National Institute of Education, 1984). The faculty teaching in learning communities try to incorporate what is known about effective educational practice (See Chickering and Gamson, 1987 for a review of the principles underlying effective educational practice). All the model programs involve some degree of collaborative planning and teaching.

Interest in collaborative learning and learning communities is growing nationally. National visibility was heightened when the National Institute of Education's report, *Involvement in Learning*, recommended the establishment of learning communities as a means of developing a sense of purpose, reducing isolation of faculty and students, and encouraging integration in the curriculum. The Washington Center's work is related to a variety of other efforts in collaborative learning throughout the United States. For a discussion of a related group, Project CUE, Collaborative Undergraduate Education, see *The Forum on Liberal Education*, 1985; Esperian, Hill, and MacGregor (1986) review the federated learning community effort which is also comprised of kindred spirits.

The model used successfully for more than four years at Seattle Central directly replicates the Evergreen curricular approach. It is the model most typically used by Washington Center institutions. Instead of fulfilling general education requirements by taking a series of disciplinary courses, students in this model program enroll in an intensive 15 credit interdisciplinary program, called a "coordinated study program," for one

or more quarters. This single program is the "full load" for both the faculty and students. The program typically enrolls 70-80 students; three or four faculty plan and teach the program together. The programs are thematic, and they cover a variety of different subject areas. Previous coordinated studies programs at Seattle Central include "The Making of Americans: Individualism" (political economy, art, literature, and history); "Power and the Person" (visual art, philosophy, music, literature); "Modern Thought, Images and Feeling: Europe 1900-1940" (philosophy, history, English, art history); and "Science Shakes the Foundations: Perspectives on Marx, Dickens, and Darwin" (political economy, English literature, biology, history). Although the programs typically began in the academic transfer divisions of the participating institutions, they quickly spread to developmental and vocational areas.

Conceiving of general education in terms of cultivating students' integrative abilities, the emphasis in these programs is on developing students' analytical and synoptic skills and their capacity to deal with complex issues from a multi-disciplinary point of view. Since these programs always include extensive work in written and oral communication, they frequently fulfill requirements in composition. Though they are somewhat more expensive than the "average" community college course at the freshman level, retention is high. Preliminary information on the students' level of cognitive development suggests that the coordinated studies programs are highly effective in fostering higher order thinking (MacGregor, 1987).

The Washington Center's success is partly due to its stress on a variety of curricular alternatives and the importance of local adaptations. We emphasize that there are multiple curricular designs for building curricular coherence and integration, and continually draw on the growing local and national network of learning community models to present a large menu of design possibilities. The Center's participating institutions have responded just as we'd hoped, by designing their own local adaptations. At Shoreline Community College, for example, writing and critical reasoning across the curriculum is a major focus and much of the effort is directed at linking composition and content courses. At Eastern Washington University, the University of Washington, and Western Washington University, the search for a more coherent approach to curriculum is being pursued through "freshmen interest groups," an approach that encourages students to register for thematically clustered courses.

To support these efforts, the Center collects and disseminates information about promising approaches throughout the United States and conducts quarterly seminars on various topics relating to the improvement of undergraduate education, such as active approaches to learning, writ-

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ing across the curriculum, and similar themes. News of these curricular approaches doesn't just flow *from* the Washington Center; the participating institutions now frequently share perspectives directly. Inter-institutional faculty exchanges are one of the Center's most powerful means of developing new curricula and promoting the transfer of knowledge between faculty members.

Crucial Features of the Model: Faculty Exchanges as a Vehicle for Curricular Transformation

The Washington Center acts as a statewide broker for inter-institutional faculty exchanges. Unlike most faculty exchange programs, the Washington Center's exchanges are not viewed simply as opportunities for faculty members to teach their usual courses in another institutional setting. Instead, the exchange program complements and extends the Center's curricular reform effort by placing exchange faculty, wherever possible, into team teaching situations in new model programs. The exchange program thereby amplifies the process of educational reform and the transfer of knowledge between individuals and institutions as newcomers learn from veterans and take it back to their home institutions.

Teams often include one exchange faculty member from another institution, one veteran from a previous learning community program, and two newcomers to collaborative teaching. Many of the institutions try to rotate various faculty members through the programs to broaden the impact on the institution as a whole, but a balance of newcomers and relatively experienced faculty members is also important to the programs' success.

The Washington Center brokers these inter-institutional teaching exchanges and provides a small housing stipend if relocation is necessary. No additional costs are incurred if the exchange is a reciprocal one. Since the exchange is typically into a team taught collaborative program, it usually isn't necessary to find exchange professors who are disciplinary equivalents – often an obstacle to conventional faculty exchange programs. If a reciprocal exchange can't be arranged, the Center makes a small ($3000-$5000 per quarter) contribution towards replacement costs. In arranging the exchanges, paperwork and red tape are purposely kept to a minimum. At most of the participating institutions, both the deans and division chairs actively support the exchange program and are highly responsive to faculty interests. By June 1989 we estimate that more

than 160 faculty in a dozen institutions will have been involved with the Washington Center faculty exchange effort – either as actual exchange faculty or team teaching with a visitor from another school.

Exchanges as a Vehicle for Inter-Institutional Community

Inter-institutional faculty exchanges in collaborative teaching settings have their own dynamics, in terms of both possible obstacles and rewards. In addition to the usual boundaries that separate faculty within an institution – departmental, historical, spatial, etc. – there are often substantial institutional boundaries within a state's higher education system relating to status, priorities, institutional culture, location, and resources. Especially pronounced are perceived differences between two and four year institutions and the private and public sector. Too often, as we squabble for status and resources, our differences capture our attention more than our commonalities and shared concerns. Indeed, this competitive pattern of thinking is so well entrenched that during the Washington Center's earliest days, we were often greeted with disbelief at the apparent act of altruism the organization represented!

Many faculty members report an initial sense of anxiety about entering a new institution, especially if it is a different type of setting than their home campus. Teaching in front of ones' colleagues is also disquieting at first, but most participants quickly find that team teaching provides an important social and intellectual base from which to experience the new community without suffering the isolation of being a newcomer and an outsider. Exchange faculty say it is an enormously important learning experience for them, often more stimulating than a sabbatical. Most leave the exchange relationship with a new sense that the higher education system is, in fact, one educational community with many shared interests. The relationships among new-found inter-institutional colleagues usually persist beyond the term of the exchange itself, as a growing circle of faculty and administrators continue to interact through quarterly conferences, seminars and the annual statewide curriculum planning retreat that the Washington Center organizes and sponsors.

Implications for Faculty Development

Collaborative teaching and inter-institutional exchanges clearly offer great rewards to many people. In many institutions, there is little faculty

interaction across departmental boundaries; reward systems, spatial assignments, curricular patterns, and time schedules combine to make faculty interaction, especially around pedagogical or intellectual ideas, rare if not nonexistent. Collaborative teaching can be powerful in bringing people together who were previously only passing acquaintances. Faculty generally report that the experience substantially alters their subsequent patterns of collegial interaction and gives them an enhanced sense of camaraderie and respect for one another. These new efforts are also powerful in terms of building collaboration and new rapport within institutions between faculty and administrators as they work together to try and adopt new approaches.

Our positive experience with faculty exchanges and collaborative teaching offers a suggestive contrast to the current literature which paints a discouraging portrait of the nation's faculty (Seidman, 1985; Boyer, 1987; Bowen and Schuster, 1987). This contrast offers important insights into alternative ways to improve undergraduate education and promote faculty vitality.

Our experience suggests that some of the simplest approaches to maintaining the intellectual vitality of our faculty are often overlooked. While improving the material conditions of our work may be necessary, it certainly won't be enough. Finding opportunities and institutional structures that empower individuals and allow them to continue to learn and re-create is also vitally important. Simply providing creative opportunities and structures to work together is apparently one of the keys.

A recent book on decision-making by Todd Sloan is suggestive in thinking about the dynamics of maintaining faculty and institutional vitality. He stresses the *social* dimensions of life's choice making and the importance of understanding the context of the individual (Sloan, 1987). Sloan points out that all of us experience everyday life as a structure with great continuity because of the regularity in the contexts and the relationships we encounter. We often come to "frame" or see our life choices as more limited than they are, in fact; the regularity of the overall structure and situation reinforces this limiting conception. Perhaps because of its unusual boundary crossing capacity, the Washington Center program seems to have a peculiar ability to encourage people and institutions to "break frame."

The repetitiveness and mind-deadening redundancy many experience in their work is a major problem in higher education; it is a hidden disease slowly eating away at faculty vitality in many of our institutions. One faculty member told us with great precision that she will face 125 sections of English 101-102 before retirement; another can precisely forecast the number of freshman essays she has left to read. In a reflective

autobiographical essay, another wrote about his fear that he "..is becoming the kind of faculty member that administrators shudder at getting stuck with; the kind that he himself shudders at getting stuck with."

Many of the people with whom we work also describe their work and their institutional relations as reaching a certain "plateau" after a number of years; this plateau often became a ceiling on their subsequent relationships and aspirations. This ceiling takes many different forms. It defines what we teach and how. It defines roles and relationships – between departments, among faculty colleagues, and relationships with administrators. Most importantly, this ceiling defines what is possible and what isn't possible. It removes many of the surprises and puzzles from everyday life.

Faculty exchanges and collaborative teaching provide important opportunities for "re-framing" simply by altering the routine work environment and social relations in substantial ways.

The social context is dramatically re-defined by collaborative teaching and cross-institutional work and new conceptions of the educational community are created. Collaborative teaching, especially across institutional boundaries, disrupts old patterns and expectations. It presents genuine puzzles and new situations. In doing so, we also become more aware of the unproductive routines we often fall into. In Sloan's terms, the experience allows us to "re-frame" our work and our institutional relationships. One of the members of our Planning Committee put this in a slightly different way: he suggested that the Washington Center works quite simply because it turns teachers (and administrators) back into learners.

It is probably significant that faculty exchanges and collaborative teaching are of special interest to mid-career faculty, who have achieved institutional security and are often highly skilled teachers. These faculty have many talents, commitments, and needs that are ignored in our institutions and largely unexplored in the current literature on faculty development.

Mid-career faculty are at a stage when they need new challenges. "When you reach a certain level of proficiency," one of them recently said, "you get kind of afraid that you are losing your edge if you don't see new challenges." Our experience also suggests that mid-career faculty are ready and eager to make more substantial commitments to long term institutional improvement. After seeing their joy and eagerness in assuming more leadership, we wonder why it hasn't happened sooner! Perhaps institutions underestimate this interest and willingness because they assume that faculty commitments are largely to national discipline-based cultures and associations. While these national affiliations are certainly important, they don't provide the day-to-day sustenance that a more local institution-

al culture and sense of community provides. Faculty may, in fact, turn to national associations in desperation because the local culture does not provide a sense of community and commitment.

Our experience compels us to think more broadly about institutional roles and what we mean by leadership. When college communities think of leadership, it is usually in terms of administrative leadership and in a single institutional setting. We seldom think in terms of leadership in the classroom. We almost never think of it across institutions. Team teaching gives mid-career faculty the opportunity to serve as mentors and leaders in the most useful possible place – the classroom itself.

Perhaps the most important aspect of collaborative teaching for both junior and senior faculty is the fact that the new model curricula put the teaching faculty totally in charge of their teaching, in terms of both content and structure. They are jointly empowered to create something new that is substantively and pedagogically sound and stimulating. Equally important, the process of designing and delivering this curriculum entails risk-taking, and it is public and collegial. It is not subject to the committee "brokering" that frequently attends and undermines meaningful curricular reform efforts. The attractiveness of the opportunity to create a more emergent curriculum can perhaps be fully appreciated only when it is contrasted with the redundancy of much college teaching (especially in community colleges too often narrowly circumscribed by transfer agreements), the loneliness and isolation many faculty apparently feel, and the bureaucratization in many institutions that has undermined people's sense of personal power and their sense of community.

This more emergent approach to curriculum requires trust in the good judgment of the participating faculty members, and perhaps this act of trust also accounts for the success of the new collaborative programs and the Washington Center. In our experience, this trust has not been abused. Generally speaking, educators want to teach something worthwhile, that they themselves find interesting. They have a conception of what this should be. Working with faculty in other disciplines provides a new challenge that in no way replicates the curriculum committee process of "assembling" a general education curriculum. After watching general education committees struggle for years to make relatively minor reforms, it is surprising to see how quickly a team of four good faculty will come up with an exciting and substantive general education program for a quarter-or year-long program. Inter-institutional transfer of these interdisciplinary programs is not usually a problem. Most states and institutions allow considerable flexibility in their transfer policies and general education programs, and the new coordinated studies program can easily fit within most general guidelines. Even in states with very restrictive

policies, integrated programs have been developed. The Quanta program at Daytona Beach Community College is a good example of creatively building an interdisciplinary learning community type program within rigorous state requirements about transfer and the Associate of Arts degree.

A Grass Roots Model for Reform

Our four-year history with this collaborative effort has led us to "reframe" our own thinking, as well, about curricular reform and faculty development. Our experience suggests that it's possible to create local cross institutional professional communities focused on improving undergraduate education. This model offers a promising and relatively low-cost approach to faculty revitalization and to exploring models for curricular reform. It has opened up a productive dialogue about undergraduate education within and among our institutions that extends considerably beyond the learning community model programs themselves. By providing structures and opportunities for bringing people together, the Washington Center hopes to encourage statewide interest in improving undergraduate education. To a remarkable extent, it has been successful in doing this, and faculty and administrators have found a new sense of common enterprise by joining hands in this effort. We have done this by operating from the assumptions that, despite our differences, we are one educational community with many overlapping interests and concerns, that we can make substantial accomplishments together that we cannot make alone, and that small scale, grass roots and collaborative approaches are the best places to begin.

References

Bowen, H. R. (1986). *American professors: A national resource imperilled.* New York: Oxford University Press.

Boyer, E. (1987). *College: The undergraduate experience in America.* New York: Harper and Row Publishers.

Chickering, A. and Gamson, Z. (1987). "Seven principles for good practice in undergraduate education." American Association for Higher Education *Bulletin,* March 3-7.

Forum for Liberal Education (1985). "Collaborative learning." Vol. 8, No. 2 (entire issue).

Esperian, J., Hill, P. J. and MacGregor, J. (1986). "Bibliography on the Federated Learning Communities and ralated programs." Olympia, Washington: The Evergreen State College.

MacGregor, J. (1987). "Intellectual development of students in learning community programs 1986-87." Olympia, Washington: Washington Center for Undergraduate Education.

National Institute of Education (1984). *Involvement in learning: Realizing the potential of higher education.* Washington, D.C.

Seidman, E. (1985). *In words of the faculty: Perspectives on improving teaching and educational quality in community college.* San Francisco, California: Jossey Bass Publishers.

Sloan, T. (1987). *Deciding: Self deception in life choices.* New York: Methuen and Co.

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DESIGN AND IMPLEMENTATION OF FOUR LEARNING COMMUNITY MODELS

by Jean MacGregor[1]

Why Learning Communities?

The project with which I am affiliated, the Washington Center for Undergraduate Education is a faculty and curriculum development consortium in Washington State. With 35 affiliated institutions (22 community colleges and 13 public and private four-year institutions), the Washington Center's central focus involves developing learning communities--ways of restructuring the curriculum and the teaching environment to improve student learning.

"Learning community" is a broad term for any one of a variety of approaches which horizontally link together several existing courses--or actually restructure the curricular material entirely--so that students have opportunities for increased depth and integration with the material they are learning, and with one another and their teachers as fellow participants in the learning enterprise.

Those of us involved in learning community work in Washington State--students, faculty and administrators at about 17 institutions now--are convinced that learning communities present a compelling and exciting answer, all at once, to many of the challenges which confront undergraduate education today:

1) **The need for students to be engaged in more active learning, and to have greater intellectual interaction with one another and with their faculty**: Learning communities restructure the time and space so that students are engaged in active and interactive learning processes around over-arching themes.

2) **The need for faculty to have greater intellectual interaction with one another**: Many learning community structures invite faculty from diverse disciplines to collaborate on creating curricular offerings; several of the model approaches have faculty actually team-teaching in the same classroom.

3) **The need for less fragmentation, and greater coherence for students in the general education curriculum**: Learning communities, by linking together coursework around themes or questions, or related content areas, provide opportunities for multiple reinforcing foci in a given quarter or

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semester. Students are explicitly invited to build a sense of connection between ideas and disciplines, and therefore see a larger academic purpose in their work.

4) The need for our college curricula to address issues which cross subject matter boundaries: Learning communities can be designed to address issues or ask "the questions of our times" from a variety of disciplinary perspectives--from issues of war and peace, to plagues and AIDS, to bio-ethics, to liberation theology. Students are still studying introductory biology, or ethics, or literature or politics, but within the context of a compelling topic or question.

5) The need for students to explore and understand diverse perspectives: Learning communities, because their learning environments frequently stress interactive and collaborative learning, and explicitly ask students to listen and respond to other students' ideas.

6) The need to stem the tide of student attrition in our institutions: Learning communities create an engaging, and socially reinforcing learning environment: students build new friendships around the ideas and the team-work of these programs. The learning community can provide a tangible social reason to stay in school.

7) The need for creative and low-cost approaches to faculty development: Learning communities provide a social structure wherein faculty can collaborate both around intellectual and pedagogical matters. For faculty members, curriculum planning and teaching in an interdisciplinary context can provide a deep, extended stretching into new territory that is completely unlike more typical involvements in discipline- or profession-based associations.

8) The need to address all of the above problems in times of fixed or shrinking budgets: Learning community models can generally be carried out at little or no cost.

Learning Community Models

Most of the learning community models with which we are involved in Washington State share the features listed above, but at each institution where a learning community program has been launched, the actual model and the way it is carried out is slightly different. Each model has been developed and tailored to institutional and faculty members' needs, interests and resources--which, naturally, we feel is crucial to their success and long-term sustainability as educational innovations. However, the four major approaches described here present a range of generic approaches, a learning community typology with which curriculum planners can invent their own institution-specific applications.

Course Linking Models

The simplest form of learning community simply involves pairing two courses, and listing them so that students co-register for them. The two

faculty of the linked courses still teach individually, but they generally coordinate syllabi and/or assignments. A pioneer in linked courses has been the University of Washington, with its nationally recognized Interdisciplinary Writing Program. Students are invited to take their freshman composition course linked to any one of fifteen general education content offerings. The English composition instructors generally work closely with the teacher of the course with whom they are linked, and at first, may even audit the course. Then, the writing in the composition course is designing specifically around writing skills in the discourse of art history, psychology, chemistry-- whatever the discipline of the linked course is. The students in the smaller composition class become a small community in what is usually a larger general education class.

Learning Clusters

Clusters create a larger learning community by linking three or four courses at a time in a given quarter or semester. Again, they are scheduled and listed so that students are invited to register for the whole cluster. The faculty still teach the clustered courses as discrete courses, but again, they plan the general emphases of their courses together, and may coordinate assignments or project work. LaGuardia Community College has been the pioneer for this model (Matthews, 1986): it requires all daytime-enrolled students in its liberal arts A.A. degree program to take English Composition in an 11 credit cluster which includes English 101, Writing the Research Paper and coursework either in social science or humanities. Here the cluster size is 26 students, the ceiling number for the English 101 offering; these 26 students travel as a group to all the courses in the cluster. Faculty are committed to planning the cluster offerings collaboratively, and to making explicit to students that the building of connections between their courses is essential. Each faculty team involved in clusters sets up an agreed-upon arrangement for meeting throughout the quarter to discuss how the learning cluster is proceeding. Learning clusters at LaGuardia have demonstrated strong rates of beginning-to-end-of-quarter retention: well over 90% for several years now--impressive for an urban community college.

FIGS and Federated Learning Communities

FIG's (Freshman Interest Groups) and FLC's (Federated Learning Communities) also involve linking three courses together, but in these models, the cohort of students travel as a smaller group to larger classes and the faculty is not expected to coordinate their syllabi at all. These two models were invented at and are appropriate to large college or university settings: Freshman Interest Groups were begun at the University of Oregon, and the Federated Learning Community model was developed at State University of New York-Stony Brook.

The Academic Advising Office at the University of Oregon conceived of Freshman Interest Groups as a vehicle for building social and academic community among freshman students during their first semester at college.

The office simply chooses sets of three courses that are typically taken by freshman, sets which have some curricular coherence. During the summer, all incoming freshmen receive an attractive announcement of the fifteen "FIG's" and an invitation to register in any one of them. FIG's are built around such themes as pre-law, health sciences, education, American studies, and art and architecture. In addition to attending three courses together, each group of 25 students in a FIG is assigned a peer advisor by the academic advising office. This older student convenes the FIG frequently during the semester. The FIG uses these times together simply for social gatherings, or it may meet to explore issues of student life at the university, or to form study groups.

The Federated Learning Community is a more complex and academically ambitious model. Invented by Evergreen's Provost, Patrick Hill (Hill, 1982) when he was a professor in the philosophy department at SUNY-Stony Brook, the FLC links or "federates" courses around an over-arching theme; for example, "Social and Ethical Issues in the Life Sciences" at Stony Brook linked a biology course (General Genetics), a history course (The Healer and the Witch in History) and a philosophy course (Philosophy and Medicine). However, students register not only for the three federated courses but also for an additional 3-credit discussion seminar. The seminar is led by a Master Learner: this person is a faculty member whose teaching schedule has been completely cleared to join the learning community. She or he becomes a learner with the students in the three federated courses, and in addition, convenes the seminar. As with the FIG model, faculty in the federated courses are not required to coordinate their offerings. It is the Master Learner's job to assist the students in discovering and exploring the integrative or disparate threads of the three courses. Faculty who have been Master Learners consistently report that it is an extremely illuminating experience, not only to be a learner in an undergraduate setting again, but to engage with students in a very immediate and tangible exploration of how disciplines differ in their assumptions and approaches. (Miller, 1983)

Coordinated Studies

Coordinated studies models offer the most radical restructuring of the curriculum. Here, the learning community--both faculty and students--are engaged full-time in interdisciplinary, active learning around themes. Faculty members generally teach only in the coordinated study, and students register for it as a total package, their entire course load for the quarter or semester. This is the model around which the curriculum of The Evergreen State College was developed (Jones, 1981). Coordinated studies programs are generally team-taught by three or four faculty members, but offerings at several community colleges in Washington State involve as few as two faculty offering 10-credit coordinated study packages. These programs are diverse in their emphasis: "Matter and Motion" is a year-long program of study in college calculus, chemistry, physics and lab computing; "Science Shakes the Foundations: Dickens, Darwin, Marx and You" is a one-quarter, freshman level offering in English composition, physical anthropology, history of science and economics.

The team-teaching and generally full-time nature of coordinated studies breaks open the traditional class schedule. There are infinite possibilities for scheduling longer blocks of time for extended lectures, discussion, field trips, and workshops. This opportunity to restructure the time schedule, coupled with the team-teaching by the faculty, make possible a powerful climate for active, and interactive learning. An additional hallmark of coordinated studies programs is the "book seminar," the reading of primary texts and extended discussion of them in seminars which are usually held twice a week. The book seminar has been a long-standing tradition at Evergreen, whose curricular roots are in the Great Books tradition of Alexander Meiklejohn, and it appears as a standard feature in most of the coordinated study replicate programs around Washington State.

Learning Community Implementation

With the exception of Evergreen, where the curriculum is built around these kinds of curricular models, learning communities generally live within or alongside of the college's regular course offerings. As mentioned above, the particular model and the way it is implemented varies from college to college. Its beauty truly is its infinite adaptability. The Washington Center consortium works to build and strengthen learning community work in several ways. It brokers faculty exchanges between institutions with learning communities, so that faculty have an opportunity to meet and work with new colleagues at a different institution, and to acquire deeper perspectives on learning community approaches. The Center offers conferences, seminars, retreats and consultants (called "kibitzers) so that curricular approaches, pedagogical ideas, and implementation strategies can be shared. The Center has also embarked on building a state-wide network to evaluate the outcomes of the learning community efforts (MacGregor, 1986).

By design, learning communities stretch students, and shake them out of too comfortable patterns of "doing school." The same could be said for institutions as well: implementing learning community efforts cannot help but stretch the usual patterns of doing things. As with any educational innovation, building and sustaining learning communities requires leadership and patience, a willingness to take risks and to experiment, and perhaps most significantly here, commitment to collaborating across typical organizational boundaries. We invite the reader to be in touch with the individuals listed below who are pioneering in this learning community work.

REFERENCES

Hill, Patrick J. "Communities of Learners: Curriculum as the Infrastructure of Academic Communities." In In Opposition to the Core Curriculum: Alternative Models of Undergraduate Education, edited by James W. Hall and Barbara L. Kevles. Westport, Connecticut: Greenwood Press, 1982.

Jones, Richard M. Experiment at Evergreen. Cambridge, MA: Schenkman Publishing, 1981.

Matthews, Roberta. "Learning Communities in the Community College: A Simple Solution to a Complex of Problems." Community, Technical and Junior College Journal (November, December 1986) 44-47.

MacGregor, Jean. "Intellectual Development of Student in Learning Community Model Programs 1985-86." The Washington Center for Improving the Quality of Undergraduate Education: Occasional Paper #1, 1986.

Miller, Marjorie. "On Making Connections." Liberal Education 69 (1983).

LEARNING COMMUNITY RESOURCES

Linked Writing Courses

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Learning Clusters

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Faith Gabelnick, Director — Phone: 6616/383-1787
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INTELLECTUAL DEVELOPMENT OF STUDENTS IN LEARNING COMMUNITY PROGRAMS 1986-87

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Introduction

This report summarizes a first effort to measure the intellectual development of students in learning community programs in two- and four-year institutions in the state of Washington.

The Washington Center for Improving the Quality of Undergraduate Education is a two-year-old consortium of thirty-three colleges in the state of Washington.[1] It focuses on faculty and curriculum development, particularly through the vehicle of interdisciplinary "learning communities." These programs generally are offerings of large blocks of academic credit in which a single cohort (or "community") of students enroll; they last one or more quarters; and they are team taught by two, three, or four faculty members around an overarching question or theme.

During the 1986-87 academic year, under a larger Ford Foundation grant supporting the development of the Washington Center consortium, the Center began a modest effort to evaluate its model learning community and faculty exchange programs in seven of its participating institutions. The evaluation included an examination of outcomes for faculty and institutions as well as for students. One measure of student development, the Measure of Intellectual Development instrument, was used in all the learning community programs.

About the Measure of Intellectual Development

The Measure of Intellectual Development (or "MID") is one of several paper-and-pencil tests adapted from the scheme William Perry, Jr., presented in his seminal work, Forms of Intellectual and Ethical Development in the College Years. (Perry, 1970, 1981) Perry, the Director of the Bureau of Study Counsel (that is, the counseling center) at Harvard, and his colleagues were interested in exploring young adult development during the post adolescent years, but more particularly, in the context of socialization to the pluralism of the academic community. The research with Harvard men entailed multiple, audio-taped interviews at the end of each year in college. The interviews were long, and open-ended, with no pre-formed questions and only minimal direction from the counselor; this format allowed a wealth of qualitative data to emerge. Extensive analysis of the transcriptions of these interviews enabled Perry and his colleagues to begin to see a sequential pattern of development in students, from a rather simplistic and authority-dependent view of the world and knowledge to a much more complex and "conceptually relativistic" one. A pattern also emerged, of making increasingly complex commitments in a relativistic world. A brief summary of the stages or "positions" of Perry's scheme is included as Figure 1. on page 7.

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[1] A Fact Sheet on the Washington Center is included as Appendix A.

As it has become more widely known, the "Perry scheme" has been regarded largely as a descriptive model, for understanding students; only recently have college educators begun to see it as a prescriptive one as well, for the design of more effective counseling and teaching approaches. Several dozen researchers around the country have been exploring strategies for measuring student development, both in college in general, in specific disciplines, and with respect to value development and career aspirations.[2] Counselors and other student development personnel and, more recently, growing numbers of faculty members are finding the scheme a powerful one for understanding differences in student behavior and attitudes, and in student responses to various learning situations. In recent years, however, there has been increasing attention to the design of both teaching and curricula in order to encourage and challenge and support students who are functioning at differing levels of complexity, and who make meaning in different ways. (Bizzell, Belenky et al., Copes, Gabelnick et. al., Nelson, to name just a few).

In recent years numbers of researchers have been exploring simpler and less costly ways (than the recording, transcription and analysis of open-ended interviews) to assess where students are relative to "the Perry scheme" and to measure development over time. A widely used measure is the M.I.D., which was developed by Lee Knefelkamp and Carol Widick at the University of Minnesota. (Knefelkamp, Widick) It involves an essay writing exercise: students are asked to write for 20-30 minutes in response to a stimulus question having to do with classroom learning, personal decision-making, or career plans. Student essays are scored by trained raters through a fairly sophisticated process of content and style analysis. (A summary chart of the M.I.D. positions relative to student cognition of learning environments is presented in Figure 2. on page 8). The major work and data on the M.I.D. instrument can be found at the Center Applications of Developmental Instruction, directed by Bill Moore,[3] and at Alverno College in Milwaukee, Wisconsin, where extensive studies of development relative to the Perry scheme have been conducted on Alverno students. (Mentkowski, et.al.)

The M.I.D. deals with the "Perry positions" 2 - 5; it does not attempt to rate students along the 6-9 positions having to do with how the individual makes commitments in a relativistic world. Most lower division undergraduates fall in the range of positions two through four.

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[2] Reports of research efforts, a cumulative bibliography of "Perry work," and copy service are coordinated by Larry Copes, The Perry Network, ISEM, 10429 Barnes Way, St. Paul, MN 55075.

[3] Center Applications of Developmental Instruction, 806 High Street, Farmville, VA 23901

The Learning Community Programs

The learning community programs in Washington were all freshman level offerings; the actual students enrolled were a mix of "high school direct" students and older, returning adults, with these two exceptions: the Tacoma Community College - Evergreen State College BRIDGE program is specifically targeted to older adults (average age - 42), and particularly people of color; and the Matteo Ricci ("early college") group at Seattle University consisted only of students aged 16-18.

The types of learning communities included:

coordinated studies programs: (Bellevue Community College, North Seattle Community College, The Evergreen State College, and the Tacoma Community College-Evergreen Bridge Program) team-taught interdisciplinary offerings in which students enroll for 15 to 18 quarter hours of credit. These programs involve large amounts of time in seminars on primary texts, and small group work in both writing, presentation development, and/or science labs;

federated programs: (Centralia College) clusters of three interrelated courses, in which a cohort of students has an opportunity to co-register. They then meet in an additional weekly seminar, led by all three faculty, to allow students to build connections between the courses and to come together as a community;

a standard course within a larger learning community: Matteo Ricci College, the early college program Seattle University.

These learning communities are more fully described in Appendix B.

The Use of the M.I.D.

Different M.I.D. essay questions were used, one at the beginning of the quarter or year (the "pre" test), and another at the end (the "post" test), so that evidence of progress along the developmental scale could be obtained. Generally the "pre" test essay was the "best class," or the "decision" essay; and the "post" test essay was the "ideal learning environment." The essay stimuli are presented in Figure 3. on page 9.

Faculty in these learning community programs had minimal briefing on the Perry scheme, and agreed to administer the tests voluntarily, during the first and last weeks of their quarter- or year-long program. By the same token, students wrote the essays voluntarily, and anonymously. Carbonless NCR paper was provided, so that faculty could have the option of keeping copies of the essays for their own use as entry and exit writing samples. Student scores were provided to the faculty only after the programs' conclusion and, again, anonymously.

Because faculty were generally unfamiliar with the Perry scheme, their learning community curricular offerings unfolded more as implicit than explicit developmental interventions. With the exception of the Human

Development program at Evergreen, no program addressed the concept of intellectual development. However, all the coordinated studies programs invited students to engage in learning environments and curricula operating (in Perry's terminology) at Late Multiplicity:

- diversity of viewpoints and values was seen as legitimate;
- students were encouraged to think independently as well as to rely on peers as legitimate co-learners;
- the "book seminar" was used in nearly every program: that is, students were asked to read and write response papers to primary texts and to spend several hours each week in seminar discussion of the texts;
- the use of supportive evidence, the building of connections, integrative and synoptic thinking was valued and explicitly encouraged;
- qualitative evaluations of both students and faculty as well as student self-evaluations were employed;
- self-awareness of the learning process was encouraged through journal work, writing assignments on "learning about learning," and through the narrative self-evaluation process.

Results

In programs where "pre" and "post" M.I.D. scores were obtained, results are presented in Figure 4. on page 10. On the following page (Figure 5. on page 11) are M.I.D. scores obtained in programs were only one essay sample was taken. Comparative data, kindly provided by Bill Moore of the Center for the Application of Developmental Instruction, are presented in Figures 6.- 10. on pages 12-16.

In coordinated studies programs, the averages of the intakes essays, or "pre" means, generally fall in the 2.90 - 3.0 range of Early Multiplicity. Slightly lower scores (2.67) were found in the older adult program (TCC-Evergreen BRIDGE), but Bill Moore has cautioned us that M.I.D. scores from older adult populations are particularly difficult to rate accurately. Slightly higher scores (3.18) were found in a second quarter coordinated study at Seattle Central Community College; however, many of these students were alumni of the previous quarter's coordinated study at that college.

These "pre" means are generally higher than scores for comparable college freshmen groups; they parallel scores found among junior and senior level learners at other institutions (note Figures 7. and 10.), or those scores of slightly older adult learners (Figure 9), ages 21-30. Our reading of this phenomenon is two-fold: there is a good deal of self-selection of students into these learning communities--students may be electing to learn where <u>active and collaborative learning</u> and the <u>building of intellectual connections</u> are explicitly celebrated. Second, our Evergreen and community college students populations are generally older than those at typical residential universities or colleges. The Matteo Ricci "pre" means ranged from 2.79 - 2.89, quite parallel to scores of freshman level, and 17-18 year-olds in the CADI data bank (Figure 9.)

The "post" mean scores from the coordinated studies programs range from 3.22 - 3.53. The average progress from beginning- to end-of-quarter or beginning- to end-of-year was of 0.30 to 0.45 position, with 57% to 73% of the students advancing a third or more position of development. These results are comparable (Figure 8.) to a Swarthmore College freshman year-long class, and to a semester-long program in the Honors Learning Community at the University of Maryland. Both the average mean growth, the positive change, and the "post" mean levels represent significant development along the Perry progression. For the federated program at Centralia College, both the "pre" and "post" scores were lower than those for coordinated studies, but the positive change (57%) and the average growth (0.37) over one quarter were just as strong as for coordinated studies. The Matteo Ricci course data shows no growth; however, it should be again pointed out that these students represent a younger and even-aged cohort; they were enrolled in a course, not an interdisciplinary program; and, additionally, only a small number of "post" essays were obtained.

Discussion

We in the Washington Center believe that learning communities present a powerful structural and pedagogical model for effectively enhancing undergraduate students' intellectual development. This first year's M.I.D. data from learning community programs would seem quite impressive in supporting this claim.

These results raise some questions and challenges for us, however. This first effort represents a first glimpse: the M.I.D. effort was set up as an exploratory study, not as a rigorous research effort. Second, the the M.I.D. essay topics themselves may have some built-in bias. The M.I.D. topics requested students to describe and draw observations about their direct experiences in academic settings; after a quarter or year in a generally engaging and positive multiplistic learning environment, the "post" essay ("Describe your ideal learning environment") results could be simply confirming the obvious that has just been experienced. Bill Moore's response to this concern is that the essay rating process examines a great deal more than simply the explicit references to elements of the learning environment; it examines the essays for style, language and overall coherence, and more particularly, for the rationale students present for their ideal learning environment. Further, Bill indicates that numerous studies have been conducted with mixed samples of "best class" and "ideal learning environment" M.I.D. essay topics, without significant differences between them.

Next Steps

During the 1987-88 academic year, The Washington Center will continue to use the M.I.D. in its evaluation efforts. We plan to gather M.I.D. entry and exit data from the model learning community programs in our network, as well as from comparison groups of students enrolled at the same institutions but not in learning community programs. It is our plan to build in some variation in the essay topics, and to gather careful demographic information on the students as well, to give us a more detailed context for this data about student development. In addition, we will be

administering an additional entry and exit survey to these students, of student attitudes about college in general and the learning community environment in particular. Our plan is to build a larger picture of the types of students who enroll in these programs, the kinds of attitudinal changes students experience in them, and the process of intellectual development such programs provide.

REFERENCES

Belenky, Mary Field, and Blythe McVicker Clinchy, Nancy Rule Goldberger, and Jill Mattuck Tarule. Women's Ways of Knowing. New York: Basic Books, 1986.

Bizzell, Patricia. "William Perry and Liberal Education." College English, Volume 46, Number 5 (September, 1984): 447-454.

Copes, Larry. "The Perry Development Scheme: A Metaphor for Learning and Teaching Mathematics.: For the Learning of Mathematics 3,1 (1982): 38-44.

Gabelnick, Faith, John Howarth and Nancy Pearl. "Facilitating Intellectual Development in University Honors Students." University of Maryland Honors Program, College Park, Maryland.

Knefelkamp, Lee L. "Developmental Instruction: Fostering Intellectual and Personal Growth in College Students." Unpublished doctoral dissertation, University of Minnesota, 1974.

Mentkowski, Marcia, Mary Moeser and Michael J. Strait. "Using the Perry Scheme of Intellectual and Ethical Development as a College Outcomes Measure: A Process and Criteria for Judging Student Performance." Two volumes, Alverno College, Milwaukee, Wisconsin, 1983.

Moore, William S. "The Measure of Intellectual Development: A Brief Review." Center for Applications of Developmental Instruction, 806 High Street, Farmville, Virginia 23901.

Nelson, Craig E. "Teaching Cognitive Development and Critical Thinking Across the Curriculum." Workshop materials prepared for Lilly Post-Doctoral Teaching Awards Conference, 1984. Available from the Perry Network.

Perry, William G., Jr. Forms of Intellectual and Ethical Development in the College Years: A Scheme. New York: Holt, Rinehart and Winston, 1970.

Perry, William G., Jr. "Cognitive and Ethical Growth: the Making of Meaning." In The Modern American College, pp. 76-116. Edited by Arthur Chickering et. al. San Francisco: Jossey-Bass, 1981.

Widick, Carol. "An Evaluation of Developmental Instruction in the University Setting," Unpublished doctoral dissertation, University of Minnesota, 1975)

Figure 1.

Perry's Scheme of Intellectual and Ethical Development

Dualism modified	Position 1	Authorities know, and if we work hard, read every word, and learn Right Answers, all will be well.
	Transition	But what about those Others I hear about? And different opinions? And Uncertainties? Some of our own Authorities disagree with each other or don't seem to know, and some give us problems instead of Answers.
	Position 2	True Authorities must be Right, the others are frauds. We remain Right. Others must be different and Wrong. Good Authorities give us problems so we can learn to find the Right Answer by our own independent thought.
	Transition	But even Good Authorities admit they don't know all the answers *yet*!
	Position 3	Then some uncertainties and different opinions are real and legitimate *temporarily*, even for Authorities. They're working on them to get to the Truth.
	Transition	But there are *so many* things they don't know the Answers to! And they won't for a long time.
	Position 4a	Where Authorities don't know the Right Answers, everyone has a right to his own opinion; no one is wrong!
	Transition *(and/or)*	But some of my friends ask me to support my opinions with facts and reasons.
Relativism discovered	Transition	Then what right have They to grade us? About what?
	Position 4b	In certain courses Authorities are not asking for the Right Answer; They want us to *think* about things in a certain way, *supporting* opinion with data. That's what they grade us on.
	Transition	But this "way" seems to *work* in most courses, and even outside them.
	Position 5	Then *all* thinking must be like this, even for Them. Everything is relative but not equally valid. You have to understand how each context works. Theories are not Truth but metaphors to interpret data with. You have to think about your thinking.
	Transition	But if everything is relative, am I relative too? How can I know I'm making the Right Choice?
Commitments in Relativism developed	Position 6	I see I'm going to have to make my own decisions in an uncertain world with no one to tell me I'm Right.
	Transition	I'm lost if I don't. When I decide on my career (or marriage or values) everything will straighten out.
	Position 7	Well, I've made my first Commitment!
	Transition	Why didn't that settle everything?
	Position 8	I've made several commitments. I've got to balance them - how many, how deep? How certain, how tentative?
	Transition	Things are getting contradictory. I can't make logical sense out of life's dilemmas.
	Position 9	This is how life will be. I must be wholehearted while tentative, fight for my values yet respect others, believe my deepest values right yet be ready to learn. I see that I shall be retracing this whole journey over and over - but, I hope, more wisely.

*From Perry, W. G., Jr., "Cognitive and Ethical Growth: The Making of Meaning." In A. Chickering and Associates, The Modern American College. San Francisco: Jossey-Bass, 1981, Chapter 3, pp. 76–116.

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Figure 2.

Translation of Perry Model into Student-as-Learner Characteristics

Cue Categories	Position 2	Position 3	Position 4	Position 5
View of Knowledge and Learning	•focus on what to learn-content, facts •knowledge = collection of information	•focus on how to learn-processes, methods •"good" learning is practical, relevant	•focus on how to think •"New Truth"	•focus on how to think in context •rules of adequacy to judge knowledge
Role of Authority	•Teacher is source of right answers •Teacher is responsible for the learning	•Teacher is source of methods to right answers •Teacher assumes multiple roles	•Teacher is source of ways to think •Student either clings to authority(Adh.) or discounts expertise(Opp.)	•Teacher is source of expertise •Student seeks mutuality of learning
Role of Learners/Peers	•Learner responsibility is to reproduce information •Peers rarely mentioned other than notations of friends in class	•Learner responsibility is to work hard •Peers are interesting sources of diversity	•Learner responsibility is to think independently •Peers are legitimate sources of learning because everyone has a right to own opinion	•Learner responsibility is to exercise the mind •Peers are truly legitimate sources of learning
Language	•absolutes •dichotomies	•qualifiers •vague, unspecific terms (fuzzy)	•absolutes within multiplicity •dichotomies, but more elaborate than a 2	•language demonstrates analysis and synthesis •extensive self-processing
Multiples/Quantity	•simplistic lists •little or no recognition of multiples	•quantity terms •"corraling"	•multiplicity/diversity seen as part of learning process •quality begins to be as, and sometimes more important than, quantity	•integration of multiples •multiplicity/diversity is assumed
Atmosphere	•safe learning environment •structured, traditional formal process preferred	•variety of methods endorsed •less formal & traditional processes accepted	•may reject rote learning, memorization •non-trauitional teaching is acceptable	•excited by ideas •search for synthesis endorsed
Role of Evaluation	•values clear, straightforward approach •test questions should be clear-cut	•concern with fairness •hard work = good grades	•may question teacher's right to evaluate student •learning to accept qualitative criteria as legitimate in evaluation	•separates evaluation of work from evaluation of self •values qualitative feedback

Adapted from Knefelkamp, L. L., & Cornfeld, J. L. "Combining Student Stage and Style in the Design of Learning Environments: Using Holland Typologies and Perry Stages," 1979 (Available from CADI)

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Figure 3.

M.I.D. ESSAY STEMS USED BY WASHINGTON CENTER 1986-87

ESSAY A : Best Class

Describe the best class you've taken in high school or college. What made it positive for you? Feel free to go into as much detail as you think is necessary to give a clear idea of the class: for example, you might want to discuss areas such as the subject matter, class activities (readings, films, etc.), what the teacher was like, the atmosphere of the class, grading procedures, etc. -- whatever you think was important. Please be as specific as possible, giving a complete description of your experiences and how you felt about it.

ESSAY AP: Ideal Learning Environment

Describe a class that would represent the ideal learning environment for you. Please be as specific and concrete as possible about what this class would include; we want you to go into as much detail as you think is necessary to give us a clear idea of this ideal class. For example, you might want to describe what the content or subject matter would be, the evaluation procedures that would be used, the demands on you as a student, what the teacher/s would be like, and so on. We want a complete description of what you would see as an ideal class.

ESSAY B: Decision

Think of the last time you had to make a decision about something that had major importance to you or the last time you had to choose between significant alternatives. 1) What did you think about having the alternatives? 2) How did you go about making the decision? 3) How did you feel about it afterwards? Please be as detailed as possible in your description.

Figure 4.

MEASURE OF INTELLECTUAL DEVELOPMENT
IN SELECTED LEARNING COMMUNITY PROGRAMS IN WASHINGTON STATE

1987-88 Academic Year

Program and Institution	Duration	Pre-mean	Post-mean	Positive Change*
TESC Coordinated Study: "Human Development"	3 quarters	2.96 (N-85)	3.34 (N-49)	57%
TESC Coordinated Study: "Matter and Motion"	3 quarters	2.97 (N-55)	3.27 (N-28)	63%
TESC Coordinated Study: "Art, Music and Literature"	3 quarters	3.04 (N-83)	3.38 (N-55)	58%
TESC Coordinated Studies: "Society & the Computer"	3 quarters	2.90 (N-81)	3.22 (N-56)	68%
North Seattle Community College Coordinated Study "Gods, Heroes & Humans"	1 quarter	2.98 (N-51)	3.43 (N-30)	73%
Seattle Central Community College Coordinated Study "Science Shakes the Foundations"	1 quarter	3.13 (N-23)	3.48 (N-23)	67%
Centralia Coll. Federated Programs "Wilderness" and "Bioethics"	1 quarter each	2.67 (N-8)	3.04 (N-12)	57%
Seattle U. Matteo Ricci Mixed group of HS Seniors and S.U. freshmen enrolled in course, "Composition, Language and Thought"	1 quarter	2.79 (N-21) 2.89 (N-25) 2.83 (N-25)	2.77 (N-49)	34%

* Indicates percent of sample showing +1/3 or more development.

Figure 5.

M.I.D. RATINGS GATHERED FROM OTHER LEARNING COMMUNITY PROGRAMS

Only one essay sample was administered in the following programs:

Program and Institution	Duration	Pre-mean	Post-mean
Tacoma Community College-Evergreen BRIDGE Program (Older adults)	3 quarters	2.68 (N-28) Essay A 2.68 (N-26) Essay B	
Seattle Central Community College Coordinated Study "Power and the Person"	1 quarter	3.07 (N-68)	
SCCC "Science Shakes the Foundations" Mixed essays, pre and post.	1 quarter	3.18 (N-25)	
Seattle Central Community College Coordinated Study "Welcome to America"	1 quarter		3.50 (N-16)
North Seattle Community College Coordinated Study "Love, Fear and Trembling"	1 quarter		3.39 (N-36)
Bellevue Community College Coordinated Study: "Televised Mind"	1 quarter		3.39 (N-38)

Figure 6.

MEASURE OF INTELLECTUAL DEVELOPMENT: NORMATIVE DATA*

Classification	N	Mean	Position 2	Tr*	Position 3	Tr	Position 4	Tr	Position 5	(%s)
Freshmen	1695	2.80	4.7	44.1	38.9	11.0	1.3			
Sophomores	367	2.88	1.9	42.0	37.6	15.3	2.7	0.5		
Juniors	358	2.91	2.5	33.0	47.2	15.4	1.4	0.3	0.3	
Seniors	337	2.98	1.8	29.7	46.9	15.4	4.7	1.5		
Age										
18	378	2.87	1.1	40.5	45.0	11.4	2.1			
19	229	2.81	1.3	48.9	38.9	7.9	3.1			
20	200	2.87	0.5	41.0	44.5	11.5	2.5			
21	116	2.91	0.9	35.3	46.6	15.5	1.7			
22+	99	2.90		43.4	41.4	10.1	2.0	2.0	1.0	
Gender										
Males	526	2.92	1.7	40.1	37.2	15.7	4.3	0.5	0.1	
Females	1287	2.89	1.0	37.2	47.0	11.8	2.4	0.3	0.1	

*Tr - Transition

* courtesy Bill Moore. Center for Applications of Developmental Instruction, 806 High Street, Farmville, VA 23901.

Figure 7.

MEASURE OF INTELLECTUAL DEVELOPMENT: SELECTED CROSS-TABULATIONS *

Age by Classification*

(Means)

	18-19	20	21	22	23+	Row N
Freshmen	2.70	2.77	-	-	2.84	78
Sophomores	2.76	2.86	2.70	-	2.96	57
Juniors	-	2.92	2.90	2.91	3.00	151
Seniors	-	-	2.81	2.96	3.25	84
Column N	67	82	100	54	67	Total N = 370

Gender by Classification*

		N	Mean	Position 2	Position 3	Position 4	Position 5
Freshmen	Males	33	2.75	30.3	66.7	3.0	
	Females	53	2.83	22.6	69.8	7.5	
Sophomores	Males	25	3.01	16.0	72.0	8.0	4.0
	Females	40	2.82	17.5	80.0	2.5	
Juniors	Males	36	2.86	13.9	83.3	2.8	
	Females	117	2.93	6.0	89.7	4.3	
Seniors	Males	41	3.00	14.6	63.4	22.0	
	Females	46	3.02	4.3	87.0	8.7	

*Single sample - large, public, mid-Atlantic university (total N = 391)

* courtesy Bill Moore, Center for Applications of Developmental Instruction, 806 High Street, Farmville, VA 23901.

Figure 8.

MEASURE OF INTELLECTUAL DEVELOPMENT: RECENT LONGITUDINAL INTERVENTION STUDIES

Institution	Sample	Duration		N	Pre-Mean	Post-Mean	Positive Change*
Gardner-Webb C.	freshman seminar	semester		57	2.44	2.69	53%
Seton Hill C.	freshman core	semester		49	2.84	3.01	41%
Swarthmore	freshman	year		13	3.00	3.53	62%
Old Dominion University	freshman orientation course	semester		77	2.70	2.85	48%
University of Maryland, College Park	female education majors	semester		57	2.72	2.91	54%
Indiana U.	upper-class & graduate biology students	semester		46	3.04	3.24	52%
Anne Arundel Comm. College (Maryland)	2-yr. college students	semester		19	2.67	2.77	32%
University of Maryland, College, Park	FIPSE Project	semester	X[1]	15	2.94	3.13	53%
			C[2]	16	3.00	3.03	27%
			H[3]	16	2.97	3.34	56%
Memphis State University	all freshmen-career development class	semester		90	2.59	2.79	45%
Rutgers U.		semester		57	2.82	2.88	41%

[1] experimental group
[2] control group
[3] honors group

*Percent of total sample showing +1/3 position or more development.

* Data courtesy of Bill Moore, Center for Applications of Developmental Instruction, 806 High Street, Farmville, VA 23901

Figure 9.

MEASURE OF INTELLECTUAL DEVELOPMENT: A SAMPLING OF AGE COMPARISONS

Sample Source	Age Breakdown	Sample N	Perry Mean
Univ. of Maryland, College Park	17-19	37	2.70
	20-22	58	2.86
	23-25	26	2.96
	26-41	15	3.03
U. of Colorado, Denver & Metro. State C.(CO)	20-25	20	2.96
	26-30	36	3.00
	31-35	35	3.07
	36-40	27	3.12
	40+	21	3.14
U. of Wisconsin, Oshkosh (nursing students)	<=19	39	2.68
	20	33	2.64
	21	24	2.89
	22+	23	2.91
SUNY-Oswego	17-18	44	2.77
	19	28	2.71
	20	28	2.81
	21	32	2.94
	22+	30	2.86
Univ. of Maryland, College Park	18-19	19	2.86
	20-29	26	3.10
	30-39	22	3.17
	40+	22	2.97
Memphis State U. (non-traditional social work majors)	20+	24	2.87

Data courtesy of Bill Moore, Center for Applications of Developmental Instruction, 806 High Street, Farmville, VA 23901.

MEASURE OF INTELLECTUAL DEVELOPMENT
A SAMPLING OF CLASSIFICATION COMPARISONS

Sample Source		Freshmen	Soph.	Juniors	Seniors	Other
US Air Force Academy	N	30	30	30	30	
	Mean	2.72	2.93	2.82	2.72	
SUNY-Oswego	N	60	28	21	54	
	Mean	2.72	2.75	2.87	2.90	
Univ. of Maryland	N	25	22	22	66	
	Mean	2.72	2.72	2.91	2.91	
U.Wisconsin-- Oshkosh	N	12	60	22	29	
	Mean	2.70	2.70	2.74	2.96	
Univ. of Maryland (Women's Studies)	N	26	74	28	7	
	Mean	2.81	2.85	2.96	2.95	
Gettysburg College(PA)	N	--	23	24	6	4*
	Mean	--	3.13	2.97	3.28	3.92*
Union College(NY)	N	--	--	9'	16	17''
	Mean	--	--	3.03'	3.44	4.16''
Walsh College(MN)	N	92	15	38	31	
	Mean	2.74	2.69	2.78	2.88	
Winthrop College(SC)	N	8	14	16	7	
	Mean	2.42	2.69	2.67	2.95	

ASSORTED ALL-FRESHMAN SAMPLES

Sample Source	N	Mean
Memphis State U.	90	2.59
Longwood C.(VA)	146	2.63
Walsh C.(MN)	189	2.76
Seton Hill C.(PA)	147	2.84
Scripps C.(CA)	193	2.88
Millsaps C.(MS)	170	2.96*
U. of Maryland[Honors]	70	3.02

*End-of-year sampling; all others taken at beginning

*Faculty & Graduate Students
'Freshmen, Sophomores, & Juniors
''Faculty and Alumni

Data courtesy of Bill Moore, Center for Applications of Developmental Instruction, 806 High Street, Farmville, VA 23901.

APPENDIX A.

THE WASHINGTON CENTER FOR THE IMPROVEMENT OF THE QUALITY OF UNDERGRADUATE EDUCATION

Fact Sheet

THE CENTER'S PURPOSE

The Washington Center was established in 1985 at The Evergreen State College as an inter-institutional consortium devoted to improving undergraduate education. The Center focuses on low-cost, high-yield approaches to educational reform, with a special emphasis on better utilization and sharing of existing resources through inter-institutional collaboration.

INSTITUTIONS AFFILIATED WITH THE WASHINGTON CENTER

There are currently 33 institutions affiliated with the Washington Center. These include two and four year institutions and both public and private colleges. The following institutions are members of the Washington Center:

Washington State University and the University of Washington, The Evergreen State College, Western Washington State University, Central Washington University, Eastern Washington University, Pacific Lutheran University, Seattle University, St Martin's College, The University of Puget Sound, Seattle Pacific University and Antioch University - Seattle. Twenty-one community colleges are members including Bellevue, Centralia, Clark, Edmonds, Everett, Green River, Highline, Lower Columbia, North Seattle, Olympic, Pierce, Seattle Central, Shoreline, Skagit, South Seattle, Spokane Falls, South Puget Sound, Tacoma, Wenatchee Valley, Whatcom, and Yakima Valley.

MAJOR ACTIVITIES OF THE WASHINGTON CENTER

The Washington Center's central activities are inter-institutional faculty exchanges, the development of interdisciplinary model programs, conferences and seminars on effective approaches to teaching and learning, and the provision of technical assistance on topics related to excellence in undergraduate education. The Washington Center publishes a newsletter three times a year.

THE FACULTY EXCHANGE PROGRAM

As of June, 1987, more than 125 faculty members have been involved in quarter or year-long team teaching experiences with exchange faculty. Most exchanging faculty members teach in one of the model programs. Thirteen schools have been involved with inter-institutional faculty exchanges, including University of Washington, Western Washington University, The Evergreen State College, Seattle University, University of Puget Sound, and these community colleges: Bellevue, Centralia, Lower Columbia, North Seattle, Seattle Central, South Puget Sound, Spokane Falls, and Tacoma.

MODEL PROGRAMS IN OPERATION

There are model interdisciplinary learning community programs in operation or in the planning stages at more than sixteen schools, including Eastern Washington University, Western Washington University, The Evergreen State College, The University of Washington, and North Seattle, Bellevue, Centralia, Edmonds, Centralia, Green River, Lower Columbia, Seattle Central, Shoreline, Spokane Falls, Tacoma, Whatcom and Yakima Valley Community Colleges. Current programs associated with Washington Center activities have involved more than 2000 students in the past 18 months.

WASHINGTON CENTER SEMINARS

The Washington Center has sponsored workshops and seminars on active approaches to learning, learning communities as a means of improving undergraduate education, writing across the curriculum, using assessment and evaluation to improve the learning process, and on William Perry's work on intellectual development in college students.

FUNDING FOR THE WASHINGTON CENTER

From its founding in 1985 until July 1987, the Washington Center was supported entirely by private foundations. Funds from the Exxon Education Foundation in 1985-86 focused on faculty development and the creation of learning community model programs. A grant from the Ford Foundation currently is directed towards curricular coherence, faculty development, and the creation of closer partnerships between two- and four-year institutions. The Matsushita Foundation has granted the Center funds for the development of ties between colleges in the consortium and high schools. Finally, the Center has received its most recent funding from the Burlington Northern Foundation for faculty exchanges. All grants are designed to pass through funds to participating Washington Center institutions; in this manner, the Center successfully leverages private funds against redeployed institutional resources at a ratio of about 1:6. In December, 1986, Governor Booth Gardner recommended funding the Washington Center as part of his program to improve the state's educational system. A $400,000 biennial budget request to the 1987 Washington Legislature was successful. Even with state funding, the Center expects to continue to leverage resources and raise substantial private funds to support an expanding set of activities.

APPENDIX B.

Learning Community Programs in the Washington Center Network whose Students were Evaluated with the M.I.D.

The Evergreen State College

Human Development: Year-long coordinated study "Core Program" (Core Programs at Evergreen are geared toward the entering student); exploration of the biological, psychological and cultural roots of human behavior over the lifetime of the individual; credit in biology, psychology, anthropology, the humanities and writing. Evergreen faculty: Janet Ott, Setsuko Tsutsumi, and Rosalie Thomas Reibman. Visiting faculty from Seattle Central Community College: Bobby Righi (Fall), Jan Ray (Winter), and Nancy Finley (Spring).

Matter and Motion: Year-long coordinated study combining work in college physics, chemistry, calculus, and laboratory computing. Credit in physics, chemistry, calculus, computer programming and scientific inquiry methods. Faculty: Jeff Kelly and Robert Cole.

Art, Music and Literature: New Beginnings: Year-long coordinated study "Core Program;" introduction to the formal elements of art, music and literature; comparative studies between Neo-Classicism and Romanticism and Modernism and post-Modernism. Credit in art history, music history, literature, and writing. Evergreen faculty: William Winden, Andrew Hanfman, and Hiro Kawasaki. Visiting faculty from The University of Washington: Andrew Buchman.

Society and the Computer: Year-long coordinated study "Core Program;" an examination of the nature and impact of technology in general and of computers and the new communication technologies in particular. Credit in humanities and social sciences, social science research, writing, mathematics, logic, media studies, programming and computer applications. Evergreen faculty: Russ Fox, Betty Ruth Estes, John Aikin Cushing. Visiting faculty from Seattle University: Carl Swenson.

North Seattle Community College

Gods, Heroes and Humans: An Introduction to Western Tradition: One-quarter-long coordinated study; examination of ways human beings living in different epochs of Western civilization have explored questions of the moral and spiritual nature of the universe, the ways humans find meaning and attempt to achieve happiness in the universe. Credit: English 101 or 102, Introduction to Literature, History of Civilization, and Great Books Seminar. North Seattle faculty: Jim Harnish, Michael Kischner. Visiting faculty from Bellevue Community College: Julianne Seeman.

(North Seattle Community College, continued)

Love, Fear and Trembling: One-quarter-long coordinated study; focus on contemporary anxieties, especially those dealing with the relationships between love, fear and anxiety and how these relate to fundamental societal issues of the 20th century such as conflict and war, authoritarianism and freedom, and the growth of collective evil and their accompanying ideologies. Credit in English 102, literature, history, psychology and/or philosophy. Faculty: Marcia Barton, Larry Hall, Jim Harnish, and Tom Kerns.

Seattle Central Community College

Science Shakes the Foundations: Dickens, Darwin, Marx and You. One-quarter-long coordinated study; examination of 19th century views of evolution and how they inform the way we see the world. Credit in English 101 or 102, physical anthropology, literature, and political economy. Seattle Central Faculty: Bobby Righi, Astrida Onat, and Valerie Bystrom. Visiting faculty from Evergreen: York Wong.

Power and the Person: Looking at the Renaissance: One-quarter-long coordinated study; comparative study of three periods of re-awakening: the 15th century European Renaissance, the Harlem Renaissance of the 1920s and 30s, and the American upheavals of the 1960s. Credit in: English 101 and 102, music history, art, and history. Seattle Central faculty: Jeanne Hansen, Dick Keller, and Audrey Wright. Visiting faculty from Evergreen: Marilyn Frasca.

Welcome to America: America's Ethic Heritage: The Impact of Immigration on the West Coast: One-quarter-long coordinated study; examination of the impact of immigration on the west coast, particularly from the mid-19th century to the present. Credit in English 101 or 102, literature, sociology, anthropology and history. Seattle Central faculty: Al Hikida, Caryn Cline, and Cynthia Imanaka. Visiting faculty from Evergreen: Gail Tremblay.

Bellevue Community College

The Televised Mind: One quarter-long coordinated study; a consideration of how our perceptions become ideas, how changes in the means of communication have altered American values, how American television evolved to its present state, why we watch what we watch. Credit in English 101 or 102, literature and anthropology. Faculty: David Jurji, Jerrie Kennedy, Julianne Seeman, and Carl Waluconis.

Centralia College

Wilderness and the American Experience: Three "federated courses" offered during one quarter in Introduction to Forestry, American History and English 101, with an additional integrating seminar. Faculty: Don Foran, Dave Martin and Les Dooly.

(Centralia College, continued)

Bio-ethics: Three federated courses offered during one quarter in Philosophy (Introduction to Ethics), Genetics, and English 101, with additional integrative seminar. Faculty: David Martin, Don Foran.

Seattle University - Matteo Ricci College

Composition, Language and Thought: One-quarter-long course; study and practice in informal logic and argumentation, with emphasis upon the composition of clear and persuasive writing. This was offered both to Matteo Ricci College first year students (students enrolled in Seattle University's early college program who are equivalent in age to high school seniors) as well as to traditional Seattle University freshmen. Faculty of different sections: Andrew Tadie, Bob Larson. Visiting faculty from Evergreen: Mark Levensky.

Tacoma Community College - Evergreen BRIDGE Program

Connections: Personality, Expression and Culture: Two-quarter-long coordinated study specifically geared to older, returning adults; exploration of human perception from the perspective of three academic disciplines: psychology, anthropology and the creative arts. Credit in interdisciplinary studies in writing, psychology, anthropology and art. Tacoma Community College faculty: Frank Dippolito and Jerry Shulenbarger; Evergreen faculty: Elizabeth Diffendal.

Learning Communities: A Paradigm for Educational Revitalization

BARBARA LEIGH SMITH
M. ROSETTA HUNTER

Four years ago The Evergreen State College and Seattle Central Community College initiated a collaborative program which has successfully promoted faculty revitalization, curricular reform, and inter-institutional articulation. This program is of particular interest now with increasing national emphasis upon improving undergraduate education and in fostering inter-institutional cooperation. While many of the current efforts in this direction focus on assessment and formal articulation agreements, this model suggests that there are other roads to educational reform with more immediate impact on the classroom.

The literature suggests that effective innovations frequently have unanticipated positive spin-offs (Rogers,1983). This was certainly the case with the Seattle Central-Evergreen collaboration. Both institutions had modest initial expectations. Their motives for initiating the collaborative effort differed but they were entirely compatible; Evergreen saw the collaboration as a means of recruiting minority community college students to Evergreen; Seattle Central saw the effort as a means of revitalizing the liberal arts. Neither institution anticipated that the program would become a statewide model which would grow into a faculty-based statewide consortium, nor did they anticipate that it would have such a dramatic effect on faculty vitality.

The partnership began quite simply with a request for assistance. Attracted to Evergreen's distinctive interdisciplinary curriculum and collaborative approach to teaching, Seattle Central Dean Ronald Hamberg proposed sending two faculty to Evergreen for a quarter to learn about the interdisciplinary programs by teaching in one. This initial two person exchange led to the two key elements in the continuing collaboration: a new interdisciplinary model program at Seattle Central modeled after the Evergreen curriculum and an ongoing faculty exchange between the two institutions.

Learning Communities and Educational Reform

The new curriculum at Seattle Central can be seen as an intentionally designed "learning community". A "learning community" is a deliberate restructuring of the curriculum to build a community of learners among students and faculty. Learning communities generally structure the curriculum so that students are actively engaged in a sustained academic relationship with other students and faculty over a longer period of their time than is possible in traditional courses. There has been growing national interest in learning communities and collaborative approaches to teaching and learning (National Institute of Education, 1984; Forum on Liberal Education, 1985; Matthews, 1987; Bruffee, 1987; Esperian, Hill and MacGregor, 1986). The approach is based on the assumption that structural reform is necessary to improve undergraduate education.

"Learning Communities" can respond to a variety of factors that create negative learning environments in many institutions and contribute to a diminishing sense of community: the growing percentage of part-time faculty and commuter students, fragmentation of our institutions into isolated units, a reward structure that fails to reward teaching and institutional service, careerism among faculty and administrators whose primary allegiance is to their discipline and their own mobility rather than their institution, increasing specialization, and centralization and professionalization of governance (Seidman, 1985; Boyer, 1987; and Bowen and Schuster, 1986). Learning communities can also address the incoherence in our curriculum and the inability of the traditional curriculum to address the highly complex problems of our times.

In many institutions, the scale of typical lower division classes does little to alter this basic pattern. Large lectures hardly engender a sense of individuality and belonging. Student faculty interaction is minimal, and the major skills cultivated are too often limited to listening. Assessment procedures often stress recall and rote learning rather than the development of higher order analytic skills. Active approaches to learning are too rarely used.

The fifty minute class also limits teaching in many ways. Some of these are readily apparent. For instance, there is never sufficient time to develop complex topics, nor is there enough time for discussion. Covering the syllabus often becomes paramount. Skill teaching is divorced from content and relegated to those lowest in the college status system; it is thereby labeled "busywork", peripheral to the real business of education. The sheer redundancy of much college teaching does little to stimulate even our most creative teachers. With a note of tired resignation, one community college faculty member in her mid 40's recently remarked that she had 125 sections of English 101 to look forward to before retirement.

The new coordinated studies program radically alters the traditional teaching and learning environment. Instead of teaching three unrelated courses to three groups of different students, faculty in the interdisciplinary program teach an intensive fifteen-credit integrated program that is staffed with four faculty. Eighty students enroll in this program; the integrated program is a full load for both the students and the faculty. In the program offered at Seattle Central in Spring 1986, for example, the faculty consisted of an anthropologist, a psychologist, a visual artist and an instructor in literature. Titled "World Mythologies and the Self", the program explored comparative mythologies and the role myths play in our lives from a variety of disciplinary perspectives.

While the program produces approximately the same student credit hours as traditional ways of deploying faculty, there are substantial qualitative differences in the ways the teaching and learning process is structured, the intensity with which faculty and students interact, and the degree of coherence both students and faculty experience. Our experience also suggests that learning communities dramatically improve student retention.

Students in the new integrated curriculum report a greater sense of motivation and personal empowerment. One student recently said, "I find it very empowering. We deal effectively with the complexity of the world and I have learned that I can play a role in it." Another, also commenting on the sense of coherence said, "I like coordinated studies because competition is deemphasized and we are becoming interested in learning as if we are all pieces of a whole."

One of the critical advantages of this curricular approach is that the form can more readily support the content in crucial ways. This is made possible by breaking away from the traditional pattern of teaching in fifty-minute time blocks and four or five credit courses, a structural arrangement which makes multi-format teaching and sustained interaction very difficult. Since the integrated program is fulltime for both students and faculty, there is much greater flexibilty about the use of time. If there is an exhibition of American art at one of the many galleries in Seattle, for example, the program can set aside a day to take advantage of the exhibit. Intensive three-hour workshops can take place. A faculty member can give a lecture and her colleagues can immediately give an extended response. Students can have long, reflective conversations with visiting speakers. Competing courses don't lock students and faculty into a preestablished schedule or minimal interaction patterns. One result of changing the format is that both students and faculty experience a greater sense of coherence and control over their work.

The alteration of the form usually results in the alteration of the content in important ways as well. Skill teaching is integrated with content. Instruction in writing begins to draw on the substantive themes of the program. Tied directly to substantive question, communication skills acquire a new vitality and significance, as evidenced by faculty comments.

In the integrated program, faculty and students spend a considerable amount of time together and the amount of interaction is greatly increased. Faculty develop a good sense of each student. Because they are responsible for the students' work for the entire quarter, faculty develop a greater stake in the students and an enhanced sense of their own accountability. This is particularly evident in the greater time they voluntarily spend planning the program, advising students, and participating in such "extra" social activities as program potlucks and picnics.

Learning Communities and Faculty Revitalization

For faculty, learning communities place them in a new context and new roles with both students and colleagues. There are many differences faculty experience in the new collaborative programs. They continually tell us that this is unchartered territory for them full of anxiety, fear, discovery and joy. Despite the fact that many faculty members are broadly trained and strive to present diverse perspectives, in the traditional classroom there is ultimately *only* one faculty member, one disciplinary perspective, one methodology. In most institutions faculty members seldom interact with each other; when they do, it is almost invariably outside the classroom. Teaching is often a lonely and redundant experience; it seldom encourages faculty development or the transfer of knowledge between faculty.

The interdisciplinary program, by contrast, puts four faculty members in the same classroom. They collaboratively plan the content and pedagogical approach of the program. Although the program meets many of the content requirements of the traditional curriculum, it is a newly created curriculum in important respects. The act of creation with one's peers is in itself an important act of faculty development. When compared with the usual process of reforming the general education curriculum, the new curriculum is a testimony to the good sense and high standards of faculty who are given the liberty to create an excellent curriculum within broad guidelines.

On a daily basis, faculty observe and learn from one another and contribute to each other's lectures and workshops. When a point in a colleague's lecture is obscure, one of the other faculty asks a probing question that clarifies. An attitude of openness is encouraged and students see that multiple points of view are a reality of everyday life. Difference and "creative conflict" are seen as an unavoidable *and* a desirable feature of our complex world (Palmer, 1987).

In addition to several weekly seminars with students, there are weekly faculty seminars when the faculty meet alone or in a "fishbowl seminar" format (in which the students act only as observers) to discuss the central reading for the week. This feature of the program design is especially prized by faculty eager for more substantive dialogue with their colleagues. There is also much day-to-day planning and discussion over coffee and in the hallways. This approach radically alters the amount of firsthand collegial feedback the faculty experience. Validation, as well as constructive criticism, takes place daily in a supportive, natural setting. Faculty mirror to students the truth that we are all learners and that learning is an ongoing process. The approach says that we are interdependent and need each other's points of view. A faculty member in the social sciences develops new approaches to teach writing after working with an English faculty member. A political economist develops new strategies for using literature after working with someone in English.

Faculty report an acute sense of excitement and anxiety as they approach their first lecture before colleagues. There are highs and lows throughout the quarter as they take risks and learn from one another. The interinstitutional exchanges have their own rewards as two-year and four-year faculty gain new respect and understanding of one another. After spending a quarter at Seattle Central, an Evergreen faculty member wrote:

> I judge the value of such experience by what I learn. At Seattle Central I learned important things about modern European history from my students and other faculty. I also came to know and respect the work of the Seattle Central faculty, staff, and administrators. They were wonderful hosts to me. I loved teaching students who, in addition to going to school fulltime, worked at difficult jobs, took care of one, two and sometimes three families, gave large voluntary support to one another and were not deterred in their studies by bad high school educations, broken cars, not enough money, or snow storms. I marveled at the opportunity Seattle Central is giving to deaf students, new non-English-speaking immigrants from Southeast Asia, insecure older people, chancy teenagers and people of all kinds who can only go to school parttime.

In spite of the fear of measuring up in front of one's peers, everyone received accolades from their colleagues. Faculty who barely knew each other before teaching together began to develop close bonds and respect for one another. In almost every instance, the faculty come back stimulated and tired, but eager for more.

By the end of this year, more than twenty faculty will have participated in the Evergreen/Seattle Central faculty exchange program. Each of these faculty members spent a full quarter at another institution team-teaching with three or four new faculty colleagues. The amplification effect of this pattern has been startling; since each exchange faculty usually teaches in a four-person team, by the end of this year nearly sixty faculty members will be involved with the exchange effort. The number of students involved in programs involving exchange faculty is nearly two thousand. From a small beginning—a two person faculty exchange—two institutions have worked together to address a number of critical issues. As a low cost approach to faculty development and curriculum reform, this approach has large promise.

Establishing Learning Communities

We are frequently invited to talk about this program since the effort is seen as an unusual model of interinstitutional collaboration. Faculty in the audience are invariably excited about the opportunity and immediately recognize the power of the approach. They understand the lack of community and loneliness in our institutions. Many express an interest in working with their peers and a strong need to be involved in creating something new. At the same time, they are skeptical about whether it could happen in their institution. Indeed, our skepticism may well be the most serious obstacle to educational reform (Elbow, 1986)!

The most common questions we hear are about how to establish such a program. Doesn't it require additional funding? Is it really feasible to offer courses across disciplines? How can it be listed in the schedule of classes and on transcripts? Won't there be problems transferring interdisciplinary courses to other institutions? How can the administration, the registrar, the advising office, and the union be convinced? How will we get faculty to put in the extra planning time?

It is our experience that this program can be relatively easily implemented and for little additional cost (Bystrom, Hastings, and Phipps, 1987). In our own state, a large number of other colleges are beginning to establish learning community programs which take many different forms. Some stress a particular curricular direction. The curricular restructuring lends itself equally to vocational and developmental programs as well as honors and college transfer programs. Some of the efforts simply link two related courses. These often include efforts to link skill and content courses, such as English composition with introductory content courses, or business economics with business math. What all these efforts have in common is an explicit attempt to alter structure in a way that supports effective learning and creates an enhanced sense of academic community between students and faculty.

A number of the collaborative programs involve faculty from several different institutions. Several of the model programs explicitly link the curricula of a two-year and a four-year institution. One example is a "bridge" program co-taught by faculty from Evergreen State College and Tacoma Community College which provides approximately forty working adults with an integrated four-year curriculum. Having multiple schools working on these programs provides fertile ground

for faculty exchanges, and the exchange opportunities provide an ideal training ground in which inexperienced faculty interested in moving into more collaborative forms of teaching can work with veterans.

Our interinstitutional faculty exchanges are done on a "no-cost" basis, with only a small housing subsidy when relocation is necessary. The program requires strong administrative support in its infancy to recruit students, to insure proper advance planning, and to give the program sufficient time to mature to its expected enrollment level. In the long run, slight overstaffing usually pays for itself in terms of higher retention.

Conclusion

The Seattle Central-Evergreen program is a bellwether of what we can accomplish by working together. It is a model that has quickly kindled the imagination of a large number of people in our state as a low-cost, high-yield approach to faculty revitalization, curricular experimentation, and overall educational improvement. The effort has generated a new sense of excitement in our state and a new kind of dialogue among our institutions.

Building upon the success of the Seattle Central-Evergreen program, a new organization—The Washington Center for the Improvement of Undergraduate Education—was created in 1985 with seed funding from the Exxon Foundation and the Ford Foundation to encourage the establishment of learning community model programs and to broker faculty exchanges especially into team-teaching situations. Now, two years later The Washington Center for Improvement of Undergraduate Education is comprised of thirty-two colleges and universities and has been involved in the development of more than a dozen learning community enterprises. The Washington Center works closely with a growing number of institutions and organizations in Washington and other states interested in collaborative learning and learning community model programs. As a low-cost, grass roots effort to simultaneously address the need for faculty revitalization, curricular reform, and interinstitutional articulation, this is a model that has large promise for creating connections where none exist in the common interest of improving undergraduate education.

References

Bowen, H. R. & Schuster, J. (1986). *American professors: A national resource imperilled.* New York, New York: Oxford University Press.

Boyer, E. (1987). *College: The undergraduate experience in America.* New York, New York: Harper and Row, Publishers.

Brufee, K. (1987, March). The art of collaborative learning. *Change.*

Bystrom, V., Hastings, S. & Phipps, R. (1987). *How to plan a coordinated studies program.* Olympia, Washington: The Evergreen State College, Washington Center for the Improvement of Undergraduate Education.

Elbow, P. (1986). Methodological Doubting and Believing: Contraries in Inquiry, *Embracing Contraries: Explorations in Teaching and Learning.* New York, New York: Oxford University Press.

Esperian, J., Hill, P. J. & MacGregor, J. (1986). *Bibliography on the federated learning communities and related programs.* Olympia, Washington: The Evergreen State College.

Forum for Liberal Education (1985). *Collaborative learning, 8(2)*

Kohn, A. (1986). *No contest: The case against competition.* Boston, Massachusetts: Houghton Mifflin Company.

Matthews, R. (1987).

National Institute of Education. (1984). *Involvement in learning: Realizing the potential of higher education.* Washington, D.C.

Palmer, P. (1987). *Campus values: Moving from competition and individualism to cooperation and community.* Chicago, Illinois, keynote address to the American Association for Higher Education.

Rogers, E. (1983). *Diffusion of Innovations.* New York, New York: The Free Press.

Seidman, E. (1985). *In the words of the faculty: Perspectives on improving teaching and educational quality in community colleges.* San Francisco, California: Jossey Bass, Inc., Publishers.

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